Administration Report
Madras Presidency.
1916-17 to 1920-21

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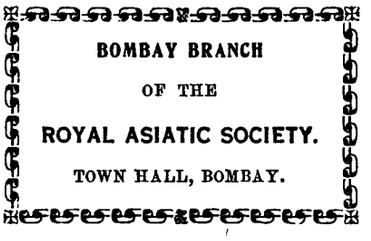

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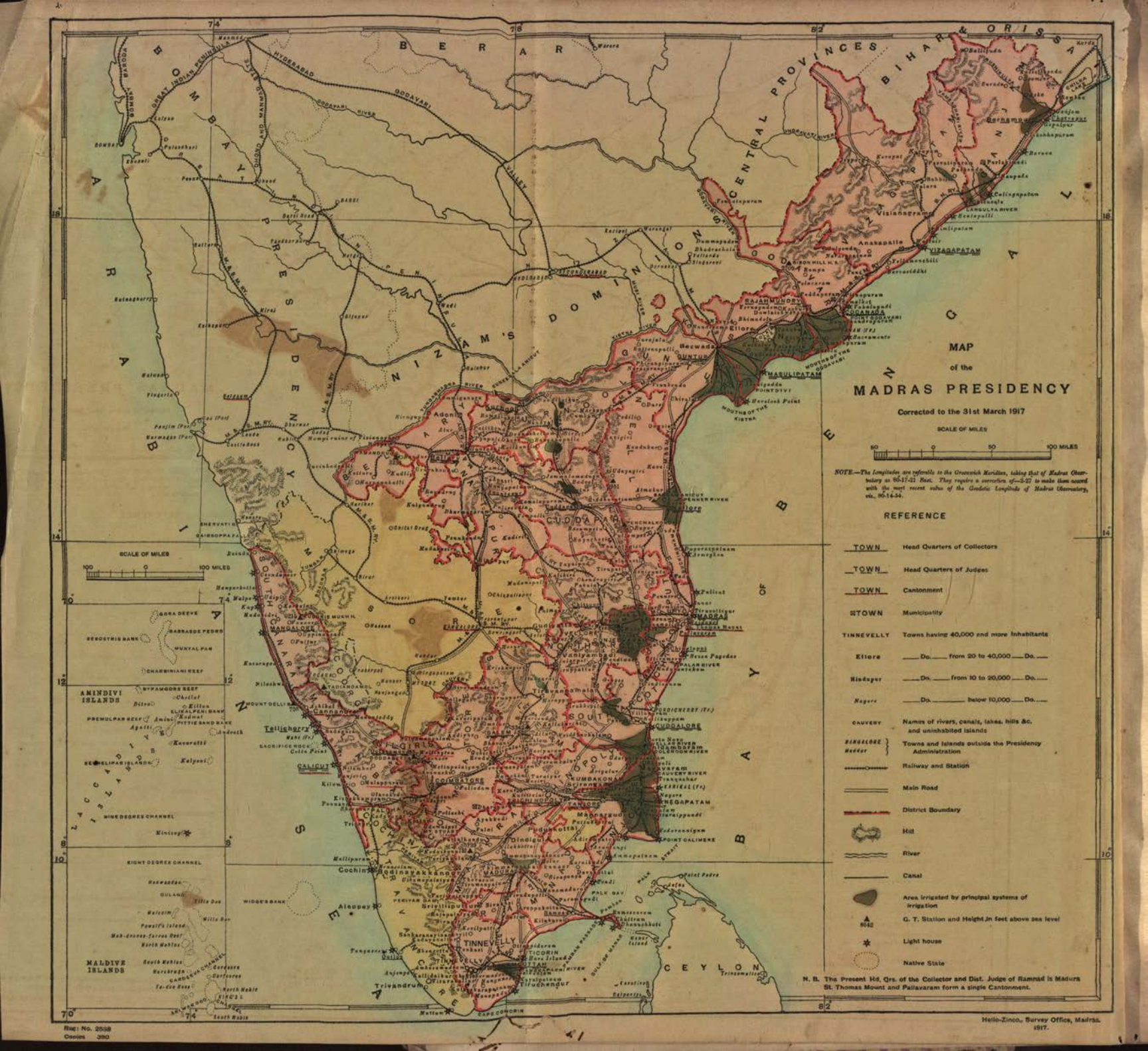
MAP
of the
MADRAS PRESIDENCY
Corrected to the 31st March 1917
SCALE OF MILES
50 0 50 100 MILES
NOTE.—The Longitudes are referable to the Greenwich Meridian, taking that of Madras Observatory as 80-17-21 East. They require a correction of—5·27 to make them accord with the most recent value of the Geodetic Longitude of Madras Observatory, viz., 80-16-54.
REFERENCE
TOWN Head Quarters of Collectors
TOWN Head Quarters of Judges
TOWN Cantonment
TOWN Municipality
TINNEVELLY Towns having 40,000 and more Inhabitants
Ellore Do. from 20 to 40,000 Do.
Nidadpur Do. from 10 to 20,000 Do.
Nagore Do. below 10,000 Do.
CAUVERY Names of rivers, canals, lakes, hills &c. and uninhabited islands
BANGALORE Towns and Islands outside the Presidency Administration
Railway and Station
Main Road
District Boundary
Hill
River
Canal
Area irrigated by principal systems of irrigation
8642 G. T. Station and Height in feet above sea level
Light house
Native State
N. B. The Present Hd. Qrs. of the Collector and Dist. Judge of Ramnad is Madura St. Thomas Mount and Pallavaram form a single Cantonment.
SCALE OF MILES
100 0 100 MILES
BOMBAY PRESIDENCY
BERAR
CENTRAL PROVINCES
BIHAR & ORISSA
NIZAM'S DOMINION
MYSORE
COORG
TRAVANCORE
COCHIN
MADRAS
BAY OF BENGAL
ARABIAN SEA
CEYLON
GULF OF MANAR
PALK BAY
GREAT INDIAN PENINSULA RY.
M.S.M. RY.
M.& M.M. RY.
S.I.R.
HYDERABAD
GODAVARI
KISTNA
PENNAR
PALAR
CAUVERY
VIZAGAPATAM
RAJAHMUNDRY
COCANADA
MASULIPATAM
NEGAPATAM
CUDDALORE
PONDICHERRY (Fr.)
KARIKAL (Fr.)
TRANQUEBAR
PORTO NOVO
CHIDAMBARAM
PORTO NOVO
PULICAT
SRIHARIKOTA
SADRAS
MADRAS
ARCOT
VELLORE
CUDDAPAH
KURNOOL
BELLARY
ANANTAPUR
CHITTOOR
NELLORE
GUNTUR
KISTNA
ELLORE
BEZWADA
KONDAPALLI
VISIANAGRAM
CHICACOLE
PARLAKIMEDI
BERHAMPUR
CHATTERPUR
KORDA
BARIPADA
BALASORE
KHURDA
PURI
CUTTACK
SAMBALPUR
CHANDA
WARDHA
AMRAOTI
AKOLA
BULDANA
KHANDESH
NASIK
AHMEDNAGAR
SHOLAPUR
BIJAPUR
BELGAUM
DHARWAR
KANARA
KOLHAPUR
SATARA
POONA
AHMEDABAD
BOMBAY
SURAT
BROACH
KAIRA
PANCH MAHALS
BARODA
RAJPIPLA
KOLAR
BANGALORE
SALEM
COIMBATORE
TRICHINOPOLY
MADURA
TINNEVELLY
TICORIN
TRIVANDRUM
CAPE COMORIN
PALGHAT
CALICUT
TELLICHERRY
MANGALORE
COCHIN
ALLEPPEY
QUILON
AMINDIVI ISLANDS
LACCADIVE ISLANDS
MALDIVE ISLANDS
ELEVEN DEGREE CHANNEL
NINE DEGREE CHANNEL
EIGHT DEGREE CHANNEL
GODAVARI RIVER
KISTNA RIVER
PENNAR RIVER
PALAR RIVER
CAUVERY RIVER
VELLAR RIVER
VAIGAI RIVER
TAMBRAPARNI RIVER
PAMBAN PASSAGE
GULF OF MANAR
PALK BAY
POINT CALIMERE
CAPE COMORIN
Hello-Zinco., Survey Office, Madras.
1917.
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REPORT

ON THE

ADMINISTRATION

OF THE

MADRAS PRESIDENCY

DURING THE YEAR

1916-17.

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1917.

CONTENTS.

PAGE

INTRODUCTION ... ... *ix*

PART I.

GENERAL SUMMARY.

I.—General and Political.

PARAS.		PAGE
1	General	i
2	Changes in the Administration	i
3	Madras War Fund	ii
4	His Excellency the Governor's tours ...	ii
5	Travancore	iv
6	Cochin	iv
7	Pudukkōttai	v
8	Banganapalle	v
9	Sandur	vi
10	Condition of the people	vi

II.—Administration of the Land.

11	Realization of Land revenue	vi
12	Surveys	vii
13	Settlements	vii
14	Land Records	viii
15	Waste lands	viii
16	Court of Wards	viii
17	Revenue and rent-paying classes	ix

III.—Protection.

18	Course of legislation	ix
19	Police	ix
20–21	Criminal Justice	x
22	Prisons	xi
23	Civil Justice	xii
24	Registration	xiii
25	Registered Companies	xiii
26	Notaries Public	xiii
27	Co-operative Societies	xiii
28	Local Board administration	xiv
29	Municipal administration—Mufassal ...	xiv
30	Do. City of Madras.	xiv
31	Military (Volunteering)	xv
32	Marine	xv
33	Mortality caused by wild animals and snakes	xvi
34	Arms, explosives and sulphur	xvi

IV.—Production and Distribution.

35	Agriculture	xvi
36	Civil Veterinary Department	xvii
37	Weather and crops	xvii
38–39	Horticulture	xvii
40	Government Cinchona Plantations ...	xviii
41	Fisheries	xviii
42–46	Forests	xviii
47	Mines	xx
48	Manufactures	xx
49–52	Sea-borne trade	xxi
53	Public Works—General	xxiii
54	Railways	xxiii
55	Tramways	xxiv
56	Canals	xxiv
57	Irrigation	xxiv

V.—Revenue and Finance.

PARAS.		PAGE
58	General revenue and expenditure	xxiv
59	Imperial revenues	xxv
60	Provincial revenues	xxvi
61	Local funds	xxvi
62	Port and Marine funds	xxvi
63	Municipal revenues	xxvii
64	The Abkāri Department	xxvii

VI.—Vital Statistics and Medical Services.

65	Vital statistics	xxvii
66	Emigration and Immigration	xxvii
67	Medical relief	xxviii
68	Medical College and schools	xxviii
69	The Pasteur Institute, Coonoor	xxviii
70	Lunatic Asylums	xxviii
71	Sanitation	xxviii
72	Vaccination	xxix

VII.—Instruction.

73	General	xxix
74	General statistics and finance	xxix
75	University and Collegiate education ...	xxix
76	Secondary education (boys)	xxix
77	Elementary education (boys)	xxx
78	Special education	xxx
79	Female education	xxx
80	European education	xxx
81	Reformatory School, Chingleput... ...	xxx
82	Government examinations	xxx
83	Lawrence Memorial School	xxx
84	School of Arts	xxxi
85	Libraries	xxxi
86	Periodicals	xxxi
87	Registration of books	xxxi
88	Government Museum and Marine Aquarium	xxxi
89	Meteorology	xxxi
90	Astronomy	xxxi

VIII.—Archaeology.

91	Archæology	xxxii
92	Epigraphy	xxxii

IX.—Miscellaneous.

93	Ecclesiastical...	xxxii
94	Stationery	xxxii
95	Government Press, Madras	xxxii
96	District Presses	xxxii
97	Chemical Examiner's Department ...	xxxii
98	Charitable institutions	xxxiii
99	Muhammadans in the service of Government	xxxiii

PART II.

DEPARTMENTAL CHAPTERS, ETC

CHAPTER I.—PHYSICAL AND POLITICAL GEOGRAPHY.

PHYSICAL.

PARA.		PAGE
1	**Physical Features of the Country, Area, Climate and Chief Staples**	1

POLITICAL.

PARAS.		PAGE
2	**Historical Summary**	1
3	**Form of Administration**	1
4	**Character of Land Tenures**	1
5	**System of Survey**	1
6	**System of Settlements**	1
7	**Civil Divisions of the British Territory**	2
8	**Details of the Census of 1911—Tribes and Languages**	2
	Changes in the Administration.	
9	Changes in the Administration ...	2
	Relations with Tributary States and Frontier Affairs.	
	TRAVANCORE STATE.	
10	Political	2
11	General	2
12	Administration	2
13–18	Protection and Legislation	3
19–21	Production and Distribution	3
22	Public Works Department	4
23	Railways	4
24	Anchal	4
25–27	Vital statistics and Medical services ...	4
28	Education...	4
	COCHIN STATE.	
29	General and Political	5
30	Finance	5
31	Legislation	5
32	Village Panchayats	5
33	Anchal	5
34–37	Production and Distribution	5
38	Tramway	6
39	Railway	6
40–44	Protection	6
45–48	Vital statistics and Medical services ...	6
49	Public Works	7
50	Instruction	7
51	Military	7
	PUDUKKOTTAI STATE.	
52	General	7
53	Revenue and Finance	7
54	Abkāri and Stamps	8
55–58	Law and Justice	8
59	Education	9
60	Vital statistics and Medical services ...	9
61	Local Bodies	9
	BANGANAPALLE STATE.	
62	General	10
63	Financial	10
64	Education	10
65	Public security and crime	10
66	Public health and sanitation	10
67	Forests and Industries	10
	SANDUR STATE.	
68	General and Political	11
69	Revenue and Finance	11
70	Protection	11
71	Production and Distribution	11
72	Public health and Vital statistics ...	11
73	Education	11
	Condition of the People.	
74	Condition of the people	11
	Political Pensions.	
75	Political pensions	13

CHAPTER II.—ADMINISTRATION OF THE LAND.

	Realization of Land Revenue.	
76	Sources of Land revenue	14
77	Peshkash and Shrotriyam jodi	14
78–80	Ryotwari and miscellaneous	14
81	Cesses	15
82	Collections	15
83	Coercive processes	15
84	Transfer of registration	16
85	Loans and advances	16
	Surveys.	
86	Parties	17
87	Districts	17
88	Central Office	18

Settlements.

PARAS.		PAGE
89	Parties	18
90–93	Districts	18
94	Registers	20
95	Finance	20

Land Records.

96	General	20
97	Operations preliminary to maintenance.	20
98	Current maintenance	20
99	Training of staff	20

Waste Lands.

100	Waste lands	21

Government Estates.

101	Government estates	21

Wards' Estates.

PARAS.		PAGE
102	Estates under management	21
103	Finance	21
104	Surplus balances	21
105	Agricultural improvements	22
106	Establishment charges	22
107	Works	22
108	Debts due to the estates	22
109	Debts due by the estates	22
110	Education of the wards	22
111	Encumbered estates	23
112	Miscellaneous	23

Revenue and Rent-paying Classes.

113–114	Revenue-paying classes	23
115	Rent-paying classes	23

CHAPTER III.—PROTECTION.

116	**Legislating authority**	**24**

Course of Legislation.

117	Legislative Council	24
118	Acts and Bills	24
119	Government of India	24

Police.

120	Changes in the Police force	25
121	Strength	25
122	Casualties and Health	25
123	Conduct	25
124	Education	26
125	Cost	26
126	Village Police	26
127	Armed Reserves	26
128	Railway Police	26
129	Statistics of Crime	26
130–131	Detection and prevention of crime	27
132	Criminal Investigation Department	28

Criminal Justice.

133	Courts	28
134	Village Courts	28
135	Original cases	28
136	Appeals	29
137	Reference and revision	29
138	The Jury system	30
139–140	Miscellaneous	30

Prisons.

141	Accommodation	30
142	Prisoners	30
143	Convicts	31
144	Conduct	31
145	Vital statistics	32
146	Sanitation	32
147	Financial	32

Civil Justice.

148	Courts	32
149–153	Litigation	33
154–161	Courts of original jurisdiction	33
162	Insolvency	34
163–165	Appellate Courts	35
166–169	Miscellaneous	35

Registrations and Companies.

170	Offices	35
171	Registrations	35
172	Prosecutions	36
173	Finance	36
174	Registered Companies	36
175	Notaries Public	37

Co-operative Societies.

176	General	37
177–179	Working of societies	38
180	Reserve fund	39
181	Supervision	39

Local Board Administration.

182–184	Local Boards and Union Panchayats	39
185	Receipts	40
186–191	Expenditure	41
192	Railways	41

Municipal Administration—Mufassal.

193	General	42
194	Constitution of Councils	42
195	Receipts	42
196	Loans	43
197	Incidence of taxation	43
198–199	Expenditure	43
200	Debt	44

Municipal Administration—City of Madras.

201	Financial	44
202–204	Works	44
205	Drainage	45
206	Water-supply	45
207	Education	45
208	Sanitation and Medical services	45
209	Anti-malarial operations	46
210	Miscellaneous	46

Military (Volunteering).

211	Military (Volunteering)	46

Marine.

212–214	Madras Port Trust	46
215	Minor ports	48
216	General	48

Mortality caused by Wild Animals and Snakes.

217	Mortality	49
218	Rewards	49

Miscellaneous.

219	Arms, explosives and sulphur	49
220	Poisons Act, 1904	49

CHAPTER IV.—PRODUCTION AND DISTRIBUTION.

Agriculture.

PARAS.		PAGE
221	General	50
222	Research and experiment	50
223–227	Scientific research and experiments	51
228	Aid to the Public	52
229	Agricultural Associations	53
230	Agricultural Engineering	53
231	Finance	53
232–236	Civil Veterinary Department	53

Weather and Crops.

237	Rainfall	54
238	Crops	55

Horticulture.

239	Government Botanic Gardens and Parks, the Nilgiris	55
240	The Agri-Horticultural Society, Madras.	56
241	Government Cinchona Plantations	56
242	Quinine Factory	56

Fisheries.

243	General	57
244	The West Coast stations	57
245	Piscicultural work	57
246	Soap	57
247	Social work	57

Forests.

248	Area	58
249	Forest settlement	58
250	Demarcation	58
251	Surveys	58
252	Working plans	58
253	Communications and buildings	59
254–257	Protection	59
258	Sylviculture	60
259	Exploitation	60
260	Output	61
261	Finance	61
262	Research and experiments	61
263	General	61
264	Forest College, Coimbatore	62

Mines.

265	Output	62
266	General condition of the employees	62

Manufactures.

PARAS.		PAGE
267	General	62
268	The Indian Factories Act	64
269	The Department of Industries	64

Sea-borne Trade.

270–272	General summary	65
273–276	Foreign Imports	66
277–281	Foreign Exports	69
282	Treasure	73
283	Government transactions	73
284	Shipping	73
285	Distribution of foreign trade by countries	74
286–287	General effect of the war	74
288	Coasting trade	75
289	Ports	76
290	Miscellaneous	76

Public Works—General.

291	Administrative changes	76
292	Chief Engineer's office	77

Civil Works.

293	Works in progress	78
294	Workshops	78

Railways and Tramways.

295	Control	79
296	Development	79
297	Accidents	79
298	District Board Railways	80
299	Tramways	80

Public Works—Canals.

300	Canals	80
301	Traffic	80

Public Works Department—Irrigation.

302	Gross expenditure and revenue	80
303	Class I. Major Protective Works	80
304	Productive Works	81
305–306	Revenue	81
307	Remissions	81
308	Class II. Minor Works and Navigation.	81
309	Class III. Works	81
310	Tank Restoration Scheme	82
311	Class IV. Agricultural Works	82
312–313	Investigation of projects	82
314–316	Miscellaneous	83

CHAPTER V.—REVENUE AND FINANCE.

Revenue and Finance other than Municipal.

(*a*) Gross Revenue.

317	Revenue and expenditure	84
318	Surplus revenue	85
319	Cash balances	86

(*b*) Imperial Revenue and Finance.

320	General	86
321	Land revenue	86
322	Customs	86
323	Opium	86
324	Salt	87
325	Excise (Abkāri)	87
326	Stamps	88
327	Income-tax	88
328	Other Imperial receipts	88
329	Transfers between Imperial and Provincial revenues	88
330	Other Imperial expenditure	88
331	Capital outlay on State Railways and Irrigation works not charged to Revenue.	88
332	Imperial loans	89

(*c*) Revenue and Finance other than Imperial

333	Provincial revenues	89
334	Land revenue	89
335	Stamps, Excise and Income-tax	89
336	Forests	89
337	Registration	89
338	Canal revenue	90
339	Other Provincial receipts	90
340	Other Provincial expenditure	90
341	Provincial loans	90
342–356	Local funds	91

Municipal Revenues.

357	Municipal Revenues	93

Excise Administration.

358	General	93
359	Experiments in aid of Temperance	93
360	Country liquor	93
361	Toddy	93
362	Foreign liquor	94
363	Opium and intoxicating drugs	94
364	Offences	94

CHAPTER VI.—VITAL STATISTICS AND MEDICAL SERVICES.

PARAS.		PAGE
365	**Details of Census**	**95**
	Births and Deaths.	
366	Population	95
367–369	Registration	95
370–371	Chief diseases	96
372	Europeans and Eurasians	96
	Emigration and Immigration.	
373	Regulated	97
374	Non-regulated	97
	Medical Relief.	
375	Institutions	97
376	Relief	97
377	Finance	98
378	Effects of the war	98
379–380	Medical College, Madras	98
381	Medical schools	98
	The Pasteur Institute, Coonoor.	
382	The Pasteur Institute, Coonoor ...	99
	Lunatic Asylums.	
383	Lunatic Asylums	99
	Sanitation.	
384	Sanitary Board	100
385	Sanitary Commissioner	100
386	Sanitary Engineer	100
	Vaccination.	
387	Vaccination	101

CHAPTER VII.—INSTRUCTION.

388	**General System of Public Instruction**	**102**
	Education.	
389	Progress of the quinquennial period ...	102
390	General statistics	102
391	Finance	103
392–394	Collegiate education	103
395	Secondary education	104
396	Elementary education of boys	104
397–398	Special education	104
399	Female education	104
400	European education	105
401	Education of Muhammadans	105
402	Education of Panchamas	105
403	Aboriginal and Hill tribes	106
404	Schools for the blind and for deaf mutes	106
405	Private institutions	106
406	Hostels	106
	Reformatory School, Chingleput.	
407	Reformatory School, Chingleput ...	106
	Miscellaneous.	
408	Government examinations	107
409	Lawrence Memorial School	107
410	School of Arts, Madras	107
411	**Literary Societies**	**108**
	Literature and the Press.	
412	Public Libraries	108
413	Periodicals	108
414	Registration of books	108
	Arts and Sciences.	
415–418	Government Museum	109
419	Marine Aquarium	109
420	Meteorology	109
421	Astronomy	109

CHAPTER VIII.—ARCHÆOLOGY.

422	Archæology	111
423	Epigraphy	111

CHAPTER IX.—MISCELLANEOUS.

424	**Ecclesiastical Jurisdiction**	**112**
	Ecclesiastical.	
425	Church of England	112
426	Church of Scotland	112
	Stationery.	
427	Stationery	112
	The Government Press.	
428	Finance	112
429	Publications	113
430	Printing and binding	113
431	Miscellaneous	113
432	District Presses	113
	The Chemical Examiner's Department.	
433–435	Medico-legal investigations	113
	Charitable Institutions.	
436	General	113
437	Monegar Choultry, etc.	114
438	Triplicane Langerkhana	114
	Muhammadans in the service of Government.	
439	Muhammadans in the service of Government	114

INTRODUCTION.

THE report on the Administration of the Madras Presidency for the year 1916–17 follows the same lines as the reports of previous years. The standing information contained in the red letter chapters of the report for 1911–12 is only referred to in the present report. At the head of each article in Part II the period to which it relates has been mentioned, and wherever the information given in Part I does not refer to the official year 1916–17, the period to which it relates is given in the margin. The references in italics in the margin of Part I are to the corresponding portions of Part II.

PART I.

GENERAL SUMMARY.

I.—GENERAL AND POLITICAL.

General.

1. The history of the Madras Presidency during the past year, though unmarked by striking events, has not been without interest. The curious phenomenon of local prosperity in the midst of world-wide distress is chiefly due to the self-contained character of the agricultural classes of India. The generally favourable season combined with a rise in prices of agricultural produce has enriched the village people. At the same time, the financial strain which the war has imposed on the whole Empire has necessitated the strictest economy in the sphere of Government. This factor, together with the depletion of the European staff of the Government and of private firms and the difficulties of transport by sea and rail, has resulted in a considerable measure of administrative and commercial stagnation. The restriction of imports has automatically raised a protective barrier round India, which would naturally have led to a great industrial advance, were it not for the impossibility of starting modern industry without machinery and without expert management. The only event during the year which gravely affected the agricultural classes was the serious cyclone in November 1916, which devastated a large part of the South Arcot district. Its effect was, however, only local, as can be seen from the fact that the gross revenue of the Presidency increased by Rs. 131 lakhs. A feature of the year was a slight decline in civil litigation combined with a decrease in grave crime. The peace of the political atmosphere was disturbed by the activities of the extreme section of the national party, which succeeded in arousing a ferment of political idealism among the more juvenile members of the educated classes. The possibility of the extension of this agitation to other sections of the community must be viewed with some uneasiness, since the tone of the agitation has shown a distinct tendency to become less constitutional and more embittered.

Changes in the Administration. Personnel.

2. His Excellency the Right Hon'ble Lord Pentland, P.C., G.C.I.E., continued as Governor throughout the year 1916–17. The Hon'ble Sir Harold Stuart, K.C.S.I., K.C.V.O., I.C.S., resigned his office as an Ordinary Member of Council from the 12th October 1916 and the Hon'ble Mr. H. F. W. Gillman, I.C.S., was appointed as permanent Member of Council to fill the vacancy. The term of office of the Hon'ble Sir Pazhamarneri Sundaram Ayyar Sivaswami Ayyar, K.C.S.I., C.I.E., expired with effect from the 26th February 1917 and M.R.Ry. the Hon'ble Diwan Bahadur P. Rajagopala Achariyar Avargal, C.I.E., was appointed a permanent Member of Council to fill the vacancy.

Madras War Fund.

3. During the past year the activities of the Madras War Fund have continued and expanded. It has up to date equipped and maintained both the Hospital Ship "Madras" and the River Hospital Ship "Sikkim"; it has purchased and presented to the nation 352 horses as officers' chargers; it has raised, equipped and despatched a corps of 30 motor cyclists; finally, in December 1916, the fund raised a corps of 250 gardeners, who were organized and despatched to Mesopotamia to provide the troops with fresh vegetables. In addition to these activities, the Ladies' Depot has maintained a continuous supply of comforts to the troops serving in the East. The total amount raised by the various branches of the Madras War Fund from the beginning of the war to the end of March 1917 is nearly 55 lakhs of rupees. Besides this sum considerable contributions have been made from this Presidency to the Imperial Relief Fund and to the various funds raised by the *Madras Mail* and other organizations.

His Excellency the Governor's tours.

4. During the year 1916–17 His Excellency the Right Hon'ble the Lord Pentand, P.C., G.C.I.E., Governor of Madras, made four tours, viz., fourteenth, fifteenth, sixteenth, and seventeenth. On his fourteenth tour which commenced on the 9th April 1916, His Excellency left Madras for a visit to the High Range and central planting districts of Travancore. On his way from Kodaikānal Road Station to Mattupatti via Periyakulam and Bodinayakkanūr, His Excellency inspected the new bridge over the Pambar, opened the Emperor George Coronation Library and laid the foundation stone of the new Municipal Hospital at Periyakulam. From Mattupatti His Excellency inspected the planting district and a number of the principal tea factories. At Munnār His Excellency received a deputation from the Kanan Devan Planters' Association. From Mattupatti His Excellency proceeded to Vandiperiyar via Bodinayakkanūr and Uthamapalaiyam. At Bodinayakkanūr His Excellency accorded interviews to Mr. Suppan Chettiyar, chairman of the union, and the Zamindarni of Bodinayakkanūr, and at Uthamapalaiyam His Excellency was presented with an address by the inhabitants of the Cumbum valley. At Bodinayakkanūr and Uthamapalaiyam His Excellency was presented with contributions amounting to Rs. 24,070 towards the maintenance of the Hospital Ship "Madras." His Excellency also inspected the Periyar dam. From Vandiperiyar His Excellency proceeded to Peermade where he received a deputation from the local Planters' Association. Mundakayam was next visited, where His Excellency had an opportunity of seeing an important rubber district and the local rubber factory. Ootacamund was reached on the 21st April via Kōttayam, Ernakulam, Tirūr, Kottakkal, Malappuram and Nilambūr. At Kottakkal His Excellency received an address from the members of Raja K. C. Manavedan Raja's family and the people of Kottakkal, and at Malappuram inspected the Territorials and the Special Police Force. At Nilambūr His Excellency visited the well-known teak plantations. On his way to Madras in connexion with the Legislative Council meeting His Excellency visited the Kolar Gold Fields on the 29th July 1916. The next (fifteenth) tour which began on the 17th September was to that portion of the Ramnad district which is known as the Chettinad. His Excellency left Madura on the 18th September and halted for a few hours at Tiruppattūr, where he received addresses from the citizens and Nattukottai

Chetti community of Tiruppattūr. His Excellency also visited the hospital maintained by the Church of Sweden Mission and received a welcome address from the staff and adherents of the Mission. Another halt was made at Amarāvati Pudur, where the Nattukottai Chetti community presented His Excellency with an address. At Dēvakōttai His Excellency received addresses from the Nattukottai Chetti community and from the citizens, and laid the foundation stones of the Women and Children's dispensary and the Veterinary dispensary. On his return from Dēvakōttai to Kānādukāttān His Excellency received addresses from the union panchayat and the citizens of Karaikudi, and laid the foundation stones of the High School and the Girls' School at Karaikudi. At Kōttaiyūr the Kandanūr Union Panchayat and the Nattukottai Chetti community of Kōttaiyūr presented His Excellency with addresses and at Pallattūr the Nattukottai Chetti community presented an address. Kānādukāttān was the next camp, where His Excellency received an address from the Nattukottai community, and laid the foundation stones of the Women and Children's Hospital and the Girls' School. On his way back to Madura His Excellency visited the temple and the Sanskrit School at Kōvilūr. In honour of His Excellency's visit to the Chettinad the inhabitants gave Rs. 1,16,297 towards the maintenance of the Hospital Ship "Madras." On his way to Madras in October 1916, His Excellency made a tour (sixteenth) to the fishery stations on the West Coast, the Anamalais and the Kāngayam cattle-breeding country. His Excellency visited the soap factory at Calicut, where he also presented the King's Police Medal to Mr. R. H. Hitchcock, the cannery at Beypore, and the fish-curing yard and oil works at Tanūr. At the latter place His Excellency received a sum of Rs. 809 subscribed by the fisher communities of 29 villages on the West Coast to the Madras War Fund. His Excellency took the opportunity of this tour to visit Kavalappara where he received an address from the Hon'ble Mr. K. K. R. Kavalappara Muppil Nayar. After witnessing the elephant sales at Walayar His Excellency proceeded to the Anamalais. His Excellency stopped at Valparai from which he made excursions to the surrounding planting districts. At Tonamudi His Excellency saw the school building erected for the children of the coolies and also the various processes of clearing and planting by which virgin forest is converted into tea plantations. He also inspected the township site which has been reserved for the location of public buildings. His Excellency visited Kalianapandal at the western edge of the district near the Cochin border and saw the planting extensions which are in progress there. He also visited the Stanmore Tea Factory. Coimbatore was the next camp, where His Excellency presided at the prize distribution at the Coimbatore College. He also inspected the Agricultural College and laid the foundation stone of a sports pavilion. From Coimbatore His Excellency proceeded to Kāngayam and Palayakōttai where he inspected the fine collection of cattle belonging to the Pattagar and made enquiries into the conditions under which the cattle-breeding industry is carried on. His Excellency, on his visit to Kāngayam, awarded six prizes to the best exhibits in three classes of cattle, viz., breeding bulls, working bullocks and heifers. His Excellency reached Madras on the 25th October 1916. In February 1917 His Excellency visited Bobbili

Jeypore, Waltair and Venkatagiri. At Bobbili His Excellency received an address from the people of Bobbili and visited the most important public institutions. From Bobbili His Excellency proceeded to Jeypore via Sālūru and Koraput. At Jeypore His Excellency received an address from the inhabitants, visited the school and hospital, and opened the Marsh Choultry. His Excellency also opened the new bridge over the Indrāvati, 24 miles from Jeypore. At Waltair His Excellency opened the Reading Room which was a gift by the Rani Saheba of Wadhwan, and presented the Kaisar-i-Hind medal to the Rani. From Waltair His Excellency proceeded to Venkatagiri, where he laid the foundation stone of the Queen-Empress Mary Gosha Hospital and opened the extension of the High School. Opportunity was taken of this tour to present His Excellency with donations for the maintenance of the Hospital Ship "Madras": a sum of Rs. 30,000 was given by the Maharaja of Bobbili, Rs. 10,000 by the Rani Saheba of Wadhwan and Rs. 25,000 by the Raja of Venkatagiri.

Travancore. (M.E. 1091.)* *Part II, paras. 10 to 28.*

5. The chief event of the year was the visit of His Excellency Lord Pentland to the planting districts of North Travancore in April 1916. His Highness the Maharaja spent a month at Coonoor in April and May 1916. The Junior Rani gave birth to a daughter on the 17th September 1916. The season was not favourable to agriculture; the rainfall was less than in 1090 and prices and the wages of labour were higher. The adverse effect of the war was not on the whole felt so much as in 1090 and there was an appreciable revival in trade. The total revenue fell short of the expenditure, which included Rs. 10½ lakhs spent on the extension of the railway from Quilon to Trivandrum, by nearly Rs. 3½ lakhs, and the Darbar balance was reduced from Rs. 49 lakhs to Rs. 45½ lakhs. The reduction of the expenditure during the year was mainly under Public Works. Six Regulations were passed during the year, of which the most important dealt with the protection of horses against glanders and farcy, the currency of British Indian coins in Travancore and the protection of the telegraph. There was a slight increase of crime generally and of civil litigation. There was a fall in the birth-rate but the death-rate remained stationary.

Cochin. (M.E. 1091.)* *Part II, paras. 29 to 51*

6. His Excellency Lord Pentland passed through the State in April 1916 while returning from the planting districts of Travancore. His Highness the Raja paid a visit to Madras on the invitation of His Excellency the Governor to join the Committee formed to supervise the management of the Park Fair and Exhibition held in December 1915 for the benefit of the War Fund. His Highness spent two months at Coonoor during the hot weather. The revenue of the State amounted to Rs. 48 lakhs and the expenditure to Rs. 44½ lakhs and the State surplus rose from Rs. 13½ lakhs to Rs. 17 lakhs. The year's surplus is mainly due to increased revenue collected under Excise, Stamps, Interest and Railways. The expenditure under Medical and Sanitation rose to Rs. 5½ lakhs and that under Education to Rs. 5¼ lakhs. The total number of pupils under instruction rose from 67,096 to 74,505. Five Regulations and three Proclamations were passed during the year. There was a rise in crime generally; the percentage of detection remained high and the percentage of conviction

* 17th August 1915 to 15th August 1916.

rose slightly, but the percentage of property recovered out of that lost fell from 67·77 to 53·10. The birth and death rates fell slightly. The State Railway worked by the South Indian Railway Company earned a net profit of 2·91 per cent on the capital outlay.

Pudukkottai. (Fasli 1326.)*

Part II, paras. 52 to 61.

7. The Rani gave birth to a son on the 22nd July 1916. His Highness the Raja returned to India in the last week of December 1916 and left for Australia in the first week of March 1917. The total revenue of the State rose to a little over Rs. 19 lakhs, the expenditure fell to Rs. 16·9 lakhs and the State balances increased to Rs. 30·6 lakhs. At the end of the fasli advantage was taken of the opportunity offered by the War Loan to invest a little over Rs. 12 lakhs of the State's balances. The season was unfavourable for agricultural operations, and both wet and dry crops suffered in many parts. There was again considerable progress in the repair and improvement of irrigation sources. The extensive road system of the State was maintained in good order. The Legislative Advisory Council met twice in the year and seven draft Regulations were considered. Two Regulations were passed during the fasli. Civil litigation somewhat increased and the volume of work before the criminal courts slightly decreased. There was a trifling increase in crime. Offences under the Penal Code increased and there was a fall in the percentage of cases detected. A scheme for reorganizing the Police Department of the State was submitted to His Highness for sanction towards the close of the fasli. The work of the Civil and Criminal Courts and of the Police was on the whole satisfactory. The Municipal Council continued to work smoothly. There was considerable improvement in the public health. Small-pox, which prevailed in a sporadic form during the early part of the fasli, entirely disappeared in December 1916. There were no cases of cholera. The Town Hospital and the several dispensaries did very useful work. There were three Agricultural Instructors and one Veterinary Assistant at work in the State. There were 22 co-operative credit societies transacting business. There were 186 State schools, 153 aided schools and 67 unaided schools, 47 per cent of the male and 5 per cent of the female population of school-going age attending school. The second-grade college at the capital continued to prosper.

Banganapalle.

Part II, paras. 62 to 67.

8. The most important event of the year was the devastation of the town of Banganapalle caused by the floods of the Zurreru river on 31st October 1916. The Government sanctioned the grant free of seigniorage to the amount of Rs. 2,946 of timber from the reserved forests in the Kurnool district for the relief of poor persons in the State whose houses were destroyed in these floods. Damage by the floods both to public and private property is roughly estimated at nearly Rs. 7 lakhs. A special survey establishment was entertained under the Town Improvement Scheme and an area of about 15 acres adjoining the old town has been planned and divided into blocks for the construction of houses on sanitary principles. The total receipts of the year amounted to Rs. 2,68,859 as against Rs. 2,82,478 in the previous year, the expenditure being Rs. 2,48,488 as against Rs. 3,81,345. An amount of Rs. 4,847 was spent during the year on village works and an amount of Rs. 12,429 on education.

* 1st July 1916 to 30th June 1917.

Sandur.
Part II, paras. 68 to 73.

9. The year was a good one for agriculture, which forms the occupation of the majority of the labouring classes. The manganese mines are still closed. The excessive rainfall in October and November 1916 resulted in some damage to crops. There was a rise in the price of cholam, as in the Bellary district generally, but the poorer classes appear to have been little affected. During the year 92 acres of waste land were surveyed and granted on patta and every encouragement was given to ryots to bring more land under cultivation. Public health was fair. There were no epidemics except a slight outbreak of plague in one village. Education continued on the same lines and three schools were newly opened. Financially, the State showed a surplus, though a large amount of revenue from mines, viz., Rs. 75,210, was not realized. There is no prospect of realization of the arrears till the war is over.

Condition of the people. (Fasli 1326.)*
Part II, para. 74.

10. The rainfall during both the south-west and the north-east monsoons was above the average in the majority of districts. There was an unusually heavy fall during the north-east monsoon, particularly in October throughout the Circars. A cyclone in the South Arcot district in November 1916 caused considerable loss of life, breached a large number of irrigation sources and did damage to trees and crops. The excessive rains during this monsoon in Kistna and Kurnool caused much damage to irrigation works and resulted in loss of property also in the latter district. The season was on the whole favourable except in Ramnad and Tinnevelly. There was a general rise in the price of food-grains.

II.—ADMINISTRATION OF THE LAND.

Realization of land revenue. (Fasli 1325.)†
Part II, paras. 76 to 85.

11. The current demand on account of peshkash was a little less than that of the previous year. Quit-rent on shrotriyam villages also showed a slight decrease. The total assessment on ryotwari holdings rose by nearly three lakhs, the increase being mainly due to the extensive assignment of waste lands on darkhast in the districts of Guntūr and South Kanara, to the introduction of resettlement rates in some taluks of the North Arcot district and to the favourable character of the season in Madura. The revenue derived from water-rate and second crop charges rose by Rs. 2·06 lakhs, the increase being mainly due to the favourable character of the season. Season remissions showed a decrease of Rs. 5·69 lakhs. The total demand under land revenue and cesses rose to Rs. 767·10 lakhs, of which 98·9 per cent was collected within the fasli. Of the arrear demand of Rs. 10·62 lakhs, 97·3 per cent was collected within the fasli and 0·9 per cent was written off the accounts. The balance outstanding at the end of the fasli including both arrears and current was Rs. 8·98 lakhs, which was considerably reduced by subsequent collections. Coercive processes were sparingly used in the collection of revenue and the proportion of the number of defaulters whose property was actually sold to the total number of pattadars was the same as in the previous year, i.e., 0·5 per thousand. The advances made during the fasli under the two Loans Acts fell by Rs. ·67 lakh. The charges of district administration

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* 1st July 1916 to 30th June 1917. † 1st July 1915 to 30th June 1916.

excluding the cost of village establishments were 6·8 per cent of the land revenue and cesses realized, as was the case in the preceding fasli. Including village service charges, the total charges amounted to 14 per cent, which is slightly in excess of the previous year.

Surveys. *Part II, paras. 86 to 88.*

12. Six parties and two town survey detachments were at work. One of the parties was employed almost exclusively on estate surveys in Nellore, Guntūr and Chittoor, and another was employed on estate surveys in the Circars as well as on resurvey of Government areas in Guntūr. The four remaining parties were mainly engaged on resurvey of Government tracts in South Arcot, Tanjore and Madura and on the survey of proprietary estates in Tanjore, Trichinopoly, Madurā and Salem. The total cadastral outturn for the year comprised the initial survey of 16·02 square miles, the resurvey of 1,616·99 square miles of Government land and 659·1 square miles of proprietary estates, the block survey of 2·3 square miles of whole inam villages and the survey of 277 linear miles of streets in unions. The town survey detachments completed on the detailed system the survey of the towns of Anakāpalle, Tinnevelly and Palamcottah which had been completed on the simplified system last year. They also completed the survey of Tiruvālūr town on the detailed system and made some progress with the survey of the municipalities of Vizagapatam and Tuticorin and of Māyavaram and Coimbatore extensions. The total outturn of the detachments amounted to 29·81 square miles. The Central office issued prints of village maps for 4,295 square miles, and various reprints and street maps.

Settlements. *Part II, paras. 89 to 95.*

13. All the five settlement parties continued their operations during the year. In Ganjām the revision of quit-rents on village service inams in the proprietary estates of the taluks of Berhampur and Chatrapur, the localization and classification of paik's inams in the Pālūru estate, the inam excess accounts relating to the unsettled inams in the previously settled tracts of the Goomsur and Aska taluks and of all inams in the newly settled villages of Goomsur and Chokkapād, and the revision of quit-rents in the newly settled villages of the Goomsur taluk were completed. The diglott registers and memoirs for two villages of the Chokkapād khandam and 57 villages of the previously unsettled tracts of Goomsur and a report on the introduction of settlement in both these tracts were submitted. In Vizagapatam, the block survey and classification of the whole inam villages in the district was completed and the land-cess was revised on the basis of the new classification. The revision of adangals and the survey of subdivisions were in progress in the Palkonda taluk and materials were collected for the scheme report for the resettlement of the three ryotwari taluks in the district. In Bellary, the special staff attended to patta transfer inquiries and the location of new subdivisions in respect of 22 villages. In North Arcot, resettlement rates were introduced in all the 87 villages in the taluks of South Cheyyār and Wandiwash commanded by the Cheyyār anicut system and a report on the introduction was submitted to Government. In Chittoor, the diglott registers of 370 villages in the taluks of Chittoor, Chendragiri and Palmanēr were submitted. The revision of quit-rents on enfranchised village service inams was carried out in the Chittoor, Chendragiri, Madanapalle and Vāyalpād taluks. The issue of rough

pattas for 69 villages brought the work to a close in the Trichinopoly taluk. The fair accounts of 119 ryotwari villages in the Trichinopoly taluk were handed over to the Revenue Department. The revision of adangals in the Nāmakkal taluk was also brought to a close. The balance of work connected with the localization of mamul wet areas in the Trichinopoly district was completed. The scheme report for the resettlement of the South Arcot district was submitted. The revision of adangals was completed in the remaining 231 villages of the Gingee taluk and in 165 villages of the Tirukkōyilūr taluk of the South Arcot district. The final scrutiny of survey records was completed in respect of 217 villages in the Cuddalore taluk and 53 villages in the Villupuram taluk and the field work preliminary to the introduction of resettlement in 199 villages of the Cuddalore taluk. In Tanjore, complete lists showing the revised registry consequent on the revision of adangals were published in 125 villages of the Māyavaram taluk and the final check of resurvey records was finished in 46 villages. In the Madura district, land registers were prepared for 66 villages in the Mēlūr taluk and 155 villages in the Tirumangalam taluk as well as for the villages included in the Madura municipality. Field work preliminary to resettlement was completed in 38 villages of the Periyakulam taluk and 59 villages of the Dindigul taluk. Resettlement rates were introduced in the 27 non-Periyar villages of the Periyakulam taluk and new settlement rates in the resumed inam villages of the Ramnad and Sivaganga zamindaris. The fair accounts of 66 villages in the Palni taluk were completed and the diglott registers for all the 68 villages of that taluk were written up.

Land Records. *Part II, paras. 96 to 99.*

14. Land Records staffs were employed throughout the year in all the districts of the Presidency. In most districts efforts were concentrated on regular maintenance work; but in South Arcot and in the delta taluks of Guntūr, the Land Records Inspectors were employed on the revision of village registers preparatory to resurvey. Two schools for the training of Assistant and Deputy Collectors in survey and maintenance were held during the year. Schools for the training of revenue subordinates and karnams were held in various districts.

Waste lands. (Fasli 1326.)* *Part II, para. 100.*

15. The season was on the whole favourable, but the area left fallow within patta holdings showed an increase.

Court of Wards. (Fasli 1325.)† *Part II, paras. 102 to 112.*

16. Including the Zamorin's estate newly taken over during the year, nineteen estates were under the Court of Wards at the close of the fasli. The arrear balance at the end of the year amounted to Rs. 7·84 lakhs. Of the current demand of Rs. 23·60 lakhs, Rs. 19·68 lakhs were collected within the year. The ordinary cash receipts and charges amounted to Rs. 26·74 lakhs and Rs. 18·08 lakhs. The expenditure on public works amounted to Rs. 4·61 lakhs or 19·4 per cent of the ordinary charges. The surplus balances, which exceeded a lakh in five estates, were reserved for expenditure on works of permanent utility. Of the debts due to the estates, amounting to Rs. 3·15 lakhs, Rs. ·94 lakh was recovered or remitted during the year. Excluding the balance of debt amounting to £180,800 payable in fixed annual instalments by the Kallikōta-Atagada estate, the debts due

* 1st July 1916 to 30th June 1917. † 1st July 1915 to 30th June 1916.

by the estates amounted to Rs. 8·60 lakhs. Of this Rs. 7·05 lakhs remained unpaid at the end of the year. No home-farm lands were used during the year for experiments in improved methods of agriculture. Twelve minors were at Newington during the whole or part of the year. Their health, educational and general progress were satisfactory. The Newington Advisory Committee met once and made useful proposals which were accepted by the Court. The Court contributed during the year Rs. 12,500 towards the War Fund and a monthly subscription of Rs. 950 for the Hospital Ship, on behalf of the estates under its management.

Revenue and rent-paying classes. (Fasli 1325.)*

17. The principal revenue-paying classes of the Presidency are zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The last class predominates largely and contributes about 78 per cent of the land revenue. There was an increase of 5 per cent in the total number of ryotwari holdings as compared with that of fasli 1324. Tenants in zamindari and whole inam villages constitute the rent-paying classes. The relations between landholders and tenants were on the whole satisfactory.

Part II, paras. 113 to 115.

III.—PROTECTION.

Course of legislation.

18. The Legislative Council sat on fourteen days during the year and two Acts were passed, viz., the Madras Civil Courts Amendment Act, 1916, and the Madras City Civil Court and Presidency Small Cause Courts Amendment Act, 1916. Leave was granted to a non-official additional member for the introduction of a revised Bill for amending and defining the law applicable to intestate succession among the Mappillas governed by the Marumakkattayam or the Aliyasantana Law of Inheritance, the original Bill on the subject having been withdrawn by him. A Government Bill to regulate the rate of interest and the transfer of land in the Agency tracts of the Ganjām, Vizagapatam and Gōdāvari districts, which was introduced at the meeting of the Legislative Council held on the 21st November 1916, was pending before the Council at the close of the year.

Part II, paras. 117 to 119.

Police. (1916.)

19. There was a very slight increase in the sanctioned strength of the force. The expenditure rose by Rs. 2 lakhs, chiefly in consequence of the increased pay sanctioned for the mufassal constabulary during the year and a similar increase in Madras City in September of the previous year. The enhancement of pay had however little or no effect on recruitment, but there was a decrease in the number of resignations and desertions. Discipline and conduct were on the whole satisfactory ; departmental punishments remained much the same, but dismissals and suspensions were fewer and judicial punishments also declined. There was a further increase in rewards disbursed to private individuals and village officers for assistance to the police, while the rewards earned by the members of the force showed little variation. The system of selection of candidates for the post of sub-inspector in each district by local committees came into force during the year. Efforts to secure the co-operation of village officers continued to be made. The total volume of crime diminished,

Part II, paras. 120 to 132.

* 1st July 1915 to 30th June 1916.

the decrease occurring generally, except under thefts, and being marked under offences against property attended with violence, as a result mainly of the operation of the Criminal Tribes Act and closer supervision over habitual criminals. The most tragic case of the year was the murder of Mr. H. O. D. Harding, I.C.S., District and Sessions Judge, Trichinopoly, in broad daylight, while he was about to enter the court-house. There were no serious disturbances of the public peace. The percentage of detection showed a further, though slight, improvement and sub-inspectors did fairly well in handling crime. A fair proportion of grave crime was personally investigated by gazetted officers. A tentative scheme abolishing the post of circle inspector and placing the sub-inspectors under the direct supervision and control of the subdivisional officer, the district being divided into several subdivisions, was introduced in one district in the middle of the year and in another district at the close of the year, with beneficial results. The power to refuse investigation was more freely exercised. The amount of property stolen rose slightly, while the percentage of recovery was less. The results in prosecutions were nearly the same as in the previous year. The prosecuting staff was strengthened in a few districts. The number of false cases diminished appreciably. There was a decline in the number of bad characters at large at the end of the year, and only a small proportion was, as before, out of view. Three new tribes were declared to be criminal tribes and one more settlement was notified under the Criminal Tribes Act. The Deputy Inspector-General of Police, Railways and C.I.D. was entrusted with the general control of all criminal settlements. There was a slight decrease in the number of old offenders sentenced to enhanced punishment and in the number of persons bound over for good behaviour. The Criminal Investigation Department and the Finger-Print Bureau continued to do useful work. The re-allocation of police stations in the Presidency was completed.

Criminal Justice. (1916.)

Part II, paras. 133 to 140.

Working of Courts.

20. The total number of original cases instituted in the criminal courts during the year was 343,000 or 5,000 more than in the previous year. The increase was most noticeable in Gōdāvari, Nellore, Malabar and Trichinopoly and the falling off in South Arcot, Madura and Tanjore. The Presidency Town contributed 58,000 cases, Tanjore 20,000, Trichinopoly 19,000 and North Arcot 18,000. The total number of appeals preferred fell from 10,600 to 10,200. The number of cases instituted in village magistrates' courts fell from 12,700 to 12,100. The number of cases instituted in the regular magistrates' courts in the mufassal was 272,000 against 267,000 in 1915. The average duration from the beginning to the end of the trial of cases disposed of by these courts was 6·9 days against 6·8 days in the previous year. The number of cases committed to Sessions Courts in the mufassal was 1,500 and the average duration of cases rose from 40 to 41 days. There was a decrease in the number of appeals both to first-class courts and to Sessions Courts as compared with last year. The majority of the Judges reported that the jury system worked fairly well.

State of Crime.

21. The percentage of convictions in cases tried under the Indian Penal Code was 42 against 42·5 in the previous year. Of the cases for disposal under the Code 14·2 per cent were rejected under section 203, Criminal Procedure Code, as against 13·2 in the preceding year. Considerable attention is being directed to impressing upon sub-magistrates

the importance of a critical examination of complaints at the time of presentation. Compensation under section 250, Criminal Procedure Code, was awarded against 2,300 persons, a fall of 300 which under existing conditions is regrettable. The number of cases reported under the Indian Penal Code during the year showed a decrease, being 119,000 against 120,500 in the previous year. The decrease is noticeable under the heads of criminal intimidation, criminal force and assault, criminal trespass, wrongful restraint, offences against public tranquillity, criminal breach of trust, robbery and dacoity and rape. There was an increase under hurt, offences affecting public health, contempts of the lawful authority of public servants and criminal misappropriation. The general and continued fall is under existing conditions of economic disturbance a matter for satisfaction. Of the total sentences of imprisonment passed 3,500 were for periods of fifteen days and under (apart from those passed by village magistrates). The number of short sentences is still large and is very little less than that for 1915. A great reduction is noticeable in the number of punishments by confinement in the stocks. 329 persons were released on probation of good conduct under section 562, Criminal Procedure Code. The number of cases dealt with under this section is still very small and the possibilities of its use are very imperfectly apprehended.

22. There was a substantial increase in the daily average prison population during the year. The average number was larger among convicted and civil prisoners. The total accommodation available increased and was sufficient for the prisoners though there was occasional overcrowding in a few jails especially in wards set apart for civil prisoners. The number of youthful offenders under the age of 15 years committed to the jail was smaller than in the previous year and the boys found eligible were removed to the Reformatory School at Chingleput. The Tanjore Jail for adolescents continued to be efficiently managed. Steps have been taken to teach such new industries as will be useful to the youths after release. A larger number of prisoners escaped during the year, but most of them were recaptured. The number of offences and punishments declined. There were 19 cases of corporal punishments of which 18 were awarded to habituals. The conduct of the prisoners was generally satisfactory and there was no combination against authority. Every jail has a school attached to it and prisoners are taught by paid teachers assisted by literate convicts. Lectures on religious and moral subjects are delivered by non-official gentlemen and some of them have presented money and books for jail libraries. The health of the prisoners was on the wnole good. The death-rate was 12·06 per mille as compared with 11·00 in 1915. The admissions to hospital and the deaths increased and this was to a certain extent due to a rise in the average prison population. The figures of weighments of prisoners discharged were also good, the percentage of prisoners who lost weight having been only 15·82. Numerous improvements relating to water-supply, kitchens, latrines, hospitals and ventilation were carried out during the year. The gross expenditure of the department increased but the net cost per head fell from Rs. 71-5-0 in 1915 to Rs. 65-3-0 in 1916, while the average cash earnings per head rose from Rs. 42-7-0 in 1915 to Rs. 46-11-0 in 1916.

Prisons. (1916.) *Part II, paras. 141 to 147.*

Civil Justice. (1916.)
Part II, paras. 148 to 169.

23. The total number of suits instituted in the Presidency was 544,000 against 555,000 in 1915, the highest figure on record till then. For the Presidency as a whole one suit was instituted for every 76 persons of the population as against one for every 75 persons in 1915, and the ratio for the Presidency Town was one for every 28 persons against 25 in the last year. In 1916 the total number of suits instituted was only about 11,000 less than in 1915, and of this number an even higher percentage, 89·25 as against 86·67, consisted of suits instituted for money or moveable property. The tightness of the money market leading to more numerous suits for the recovery of debts seems to be the cause of the unusually high files. The total value of suits instituted in 1916 in courts other than Village and Revenue Courts and unpaid tribunals was Rs. 936 lakhs or Rs. 155 lakhs more than in the previous year. Apart from Revenue Courts, 38 per cent of the suits instituted were of the value of Rs. 20 and less ; and 58 per cent of the suits were between the values of Rs. 20 and Rs. 500. The number of suits above Rs. 500 in value was 22,500, the highest figure on record. There were 58,000 suits of a value triable by Village Courts which were filed in the courts of District Munsifs. The total number of suits instituted in Village Courts was 136,500 against 145,600 in the previous year. The number of suits disposed of by village munsifs sitting alone rose from 121,000 in 1915 to 125,500, but there was a considerable fall in the number of suits tried by benches, 10,400 against 22,600 in the previous year. The fall is evidently due to the correction of the mistaken procedure under which the disposals of village munsifs sitting singly in bench areas had been shown as the disposals of benches. The number of suits filed in Revenue Courts other than in Agency tracts fell from 21,700 to 20,300. The number of ordinary suits filed in District Munsifs' Courts other than those for the Agency tracts was 110,000 or 3,500 more than in the previous year. There was however a decrease of 8,500 in the number of small cause suits filed, the figure being 219,000. The arrears of ordinary suits fell from 52,600 at the end of 1915 to 52,400 and the arrears of small causes from 24,000 to 22,500. Considering that District Munsifs have had to deal during the last two years with an increase of suits to the extent of over 80,000, during which period their number has only increased by six, it is highly satisfactory that the arrears have only increased by 2,500 suits since 1914. During the year the pecuniary jurisdiction of District Munsifs was increased from Rs. 2,500 to Rs. 3,000 by Madras Act III of 1916. This alteration in jurisdiction has, as was anticipated, made little difference in the District Munsifs' files. With effect from January two Special Small Cause Courts were established at Trichinopoly and Kumbakōnam. The duration in the trial of ordinary suits in Subordinate Judges' Courts has shown a marked increase during the year. In the District Courts the arrears of ordinary suits fell from 660 to 430. The number of appeals filed in District and Subordinate Judges' Courts rose. In the High Court there was a slight decrease in the number of suits instituted and an increase in disposals. The arrears of appeals decreased. The number of applications for execution received in all the courts in the mufassal except Village Courts was 357,000 against 336,000 in the previous year. Satisfaction in full was obtained in 16·7 per cent of the applications disposed of against 16·5 per cent in 1915, and satisfaction

in part in 7·8 per cent as against 7·6 per cent in 1915. The total receipts of civil and criminal courts in the Presidency in 1916 amounted to Rs. 1,12,40,000 and the charges to Rs. 87,80,000.

Registration. (1916.) *Part II, paras. 170 to 173.*

24. As in 1915, no new offices were opened. The number of registration offices was by the amalgamation of offices formerly separate reduced from 513 to 510. With the greater reconciliation of the public to the abnormal conditions created by the war the improvement in registrations which set in with July 1915 continued and they reached the record figure of 1,377,135, which represents an increase of 6 per cent over that of the pre-war year 1913 and of 7·2 per cent as compared with 1915, the net result of a rise of 7·3 per cent under documents relating to immovable property and of 5·4 per cent under all other documents including wills. The aggregate value of registered transactions rose from Rs. 41·23 crores to Rs. 45·28 crores, whilst the income increased from Rs. 22·71 lakhs to Rs. 24·66 lakhs. The expenditure fell from Rs. 13·70 lakhs to Rs. 13·58 lakhs.

Registered Companies. *Part II, para. 174.*

25. There was a further decline in registrations owing to the war. 17 new companies were registered ; 1 was transferred to Bengal and 29 ceased to exist, reducing the number of working companies from 387 at the commencement of the year to 374 at its close. The steady decrease in the number of companies which have ceased to exist in each of the three years during which the Indian Companies Act, 1913, has been in operation, is evidence that the apprehensions which prevailed in the beginning as regards difficulties in complying with the provisions of the Act were exaggerated. The average paid-up capital of Joint Stock Companies was Rs. 1,80,203, the highest since 1902. As a result of the healthy operation of the Provident Insurance Societies Act, 1912, the number of provident insurance societies declined from 21 to 18. The number of life assurance companies fell from 7 to 6.

Notaries Public. (1916-17.) *Part II, para. 175.*

26. During the year 178 registering officers performed the duties of a Notary Public at 140 stations. Operations were confined to 17 stations against 18 in 1915–16, the numbers of bills of exchange and promissory notes dealt with being 26 and 31 respectively.

Co-operative Societies.* *Part II, paras. 176 to 181.*

27. The most prominent feature of the co-operative year was the conversion of the Madras Central Urban Bank, Limited, into a Provincial Bank with its shares thrown open to societies. Three new District Banking Unions were also formed. There was a great increase in the number of local administrative unions of societies, resulting in a general improvement in collections. The total number of societies increased from 1,800 at the beginning of the year to 2,216 at its end. There was a general increase in the admission into societies of members of depressed classes. The total working capital of all societies rose from Rs. 169 lakhs to Rs. 205 lakhs. The net profit for the year was nearly two lakhs and the reserve funds rose from Rs. 8·49 lakhs to Rs. 9·63 lakhs. In spite of the tightness of the money market, loans from central banks and other societies to societies other than central rose from Rs. 59·47 lakhs to Rs. 71 lakhs. Credit continued to form the chief branch of co-operative activity ; but some interesting experiments on a small scale were made by rural societies in joint buying and selling.

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* 1st July 1916 to 30th June 1917.

Local Board Administration.
Part II, paras. 182 to 192.

28. The number and maximum strength of the district boards underwent no change and the proportion of the elected members to the total strength was practically the same as in the previous year. No new taluk boards were created, but the maximum strength of these boards was raised from 1,753 to 1,764. Seven union panchayats were constituted, while four of the existing unions were changed into municipalities. Three taluk boards enjoyed the privilege of electing their own presidents and in the case of 28 others non-officials were appointed as presidents; the percentage of official to non-official members on the boards further declined. The total income of the local boards, excluding the transactions under debt heads, increased by over a lakh; the expenditure exceeded the receipts by nearly Rs. 10½ lakhs. Of this expenditure 40·8 per cent was on public works, repairs to communications accounting for more than half of that allotment, and 15·8 per cent was spent on education. Nine new medical institutions were opened and four of the existing institutions were transferred to municipalities; the number of patients treated also advanced; the outlay on these institutions was nearly 4·9 per cent of the total expenditure. The profits derived by the District Boards of Tanjore, Kistna, Coimbatore and Guntūr from their railways amounted to 8·04, 9·4, 7·8 and 3·7 per cent respectively of the capital outlay incurred on them. Two new railway lines, one from Salem to Suramangalam in the Salem district and the other from Tirutturaippūndi to Vēdāranniyam in the Tanjore district were completed during the year and the former line has since been opened for traffic.

Municipal Administration—Mufassal.
Part II, paras. 193 to 200.

29. The new municipality of Dhārāpuram began work on 1st April 1916 and the unions of Chittoor and Bodinayakkanūr were constituted municipalities during the year. There were in all 70 municipalities with 1,089 members on the councils, comprising 89 ex-officio, 452 nominated and 548 elected councillors; the proportion of Indian to European and Eurasian members increased slightly. The current receipts of the municipalities increased by Rs. 7·48 lakhs and the income from taxation rose by Rs. 2·73 lakhs. The average incidence of taxation per head of the population further rose from Rs. 1-10-11 to Rs. 1-12-0. The aggregate expenditure exceeded the receipts by Rs. 5·44 lakhs and the closing balance was Rs. 33·98 lakhs. About 40 per cent of the expenditure was devoted to public works, Rs. 6·82 lakhs being spent on communications; the net educational charges amounted to 8·5 per cent of the income from general taxation. Excluding amounts covered by the sinking fund, the public debt outstanding against municipalities was over one-third of the annual revenues, and about 3·5 per cent was covered by sinking funds.

Municipal administration—City of Madras.
Part II, paras, 201 to 210.

30. The revenues of the Corporation of Madras showed an increase of Rs. 3·77 lakhs over those of the previous year. Of this increase, Rs. 2·20 lakhs was contributed by the income from taxation. A loan was raised in the market for improvement of water-supply and drainage and extension of electric lights and a grant was received from Government for sanitary works. The incidence of taxation rose from Rs. 3-14-5 to Rs. 4-5-3. The expenditure from revenue account was about the same as in the previous year while that from capital account rose by Rs. 1·30 lakhs. The number of miles of road reformed fell from 59·30 to 43·46, the decrease being due to restriction of road repairs, this restriction being partly caused by the

need for economy and partly due to difficulty in obtaining transport for material. Lands and buildings were acquired for widening roads and rounding off dangerous corners. Three model schools were completed and also a model cow-house. Owing to financial stringency caused by the war, the programme of construction of water-supply and drainage works was restricted to a sum of Rs. 50 lakhs spread over a period of five years. Gravitation mains and a storm water drainage which were in course of construction in the previous year were completed. The birth-rate was the highest since 1905 and was higher than the death-rate for the first time since 1904. The death-rate fell from 36·0 to 34·5 per mille, the lowest recorded since 1888. There were 17 imported cases of plague of which 11 proved fatal. More electric lights were installed. The motor fire-engines were requisitioned for twelve cases of fire during the year.

Military (Volunteering). *Part II, para. 211.*

31. During the past year the Volunteer Corps of the Presidency have contributed a considerable number both of officers and men to the combatant and non-combatant branches of the expeditionary forces. In Madras the Volunteer Guards and the Artillery Volunteers have had large contingents mobilized continuously for garrison duties. The Malabar Volunteer Rifles have performed useful service, while the Railway Corps have from time to time mobilized detachments for special duties. The close of the official year witnessed the introduction of the Indian Defence Force Scheme, but the new force cannot be said to have begun its work until April 1917.

Marine. *Part II, paras. 212 to 216.*

32. War conditions determined the trade of the port of Madras during the past year. Thus the tonnage of hides and skins exported was 50 per cent larger than the average of the previous fourteen years and the tonnage of minerals was more than three times that average. On the other hand lack of shipping caused a considerable fall in many of the chief imports, e.g., piece-goods. Total imports were 70·5 per cent, while total exports were 90 per cent of the figures for 1913–14. On the night of 22nd November 1916, the port experienced a severe cyclonic storm, as a result of which the 5,000-ton monolith structure at the head of the new North Arm was undermined and capsized with its lighthouse. The concrete blocks for a length of 117 feet of the breakwater were overturned towards the harbour side and a further length of 180 feet was damaged. The work of repairing the damage was taken up at once and by the end of March, 35,656 cubic feet of blocks had been manufactured. By the end of January 1917 the whole of the old titan crane track was put in order and a new track was laid on the North Arm. The cost of the restoration work is estimated at Rs. 15 lakhs. The gross receipts of the port during the year under review show an increase of 12·56 per cent over last year, but this increase is mainly due to the 25 per cent super dues on exports and imports. The gross expenditure was 90·82 per cent of the gross receipts, but, excluding the interest on loans, the actual working expenses came to 53·35 per cent of actual harbour earnings against 50·81 per cent in 1915–16. The whole of the substructure and the greater part of the top work of the west quay were completed during the year. This quay practically doubles the enclosed area available for steamers, and will add four first-class berths. A great deal of miscellaneous work was also completed, including the dismantling of two steel piers, the construction

of the new road and the connexion of the whole workshop yard with the metre gauge lines. The depressing effect of the war upon the trade of the minor ports continued to be felt in an even greater degree than in the preceding year. Even with regard to coasting trade there was little or no improvement although its aggregate value showed a slight increase. Hence there was a serious falling off in the port and light dues collections which necessitated the enhancement of the rates of the dues for the period of the war. Steps were taken for obtaining expert advice from home on the prospects of the Cochin Harbour Development Scheme and a set of borings was carried out in connexion with the Tuticorin Harbour investigation which proved the feasibility of constructing a harbour at that port with an approach channel of 30 feet draught.

Mortality caused by wild animals and snakes. (1916.)
Part II, paras. 217 and 218.

33. There was a decrease in the number of persons killed by wild animals during the year, the mortality being 452 against 551 during the previous year. A slight decrease was also noticeable in the number of persons killed by snake-bite. Rs. 34,238 were spent on the destruction of wild animals and the removal of rank undergrowth.

Arms, explosives and sulphur. (1916.)
Part II, para. 219.

34. There was a slight increase in the number of licences under the Arms Act issued during the year. This is satisfactory in view of the frequent complaints that have been made in recent years that the Arms Act is administered in an illiberal spirit. There has been a marked increase in the number of licences for the destruction of wild animals doing damage to crops or cattle. It is to be regretted that the number of revolver licences also increased. There was again a considerable fall in the number of licences under the Explosives Act, the explanation apparently being that the heavy rainfall restricted blasting operations.

IV.—PRODUCTION AND DISTRIBUTION.

Agriculture.
Part II, paras. 221 to 231.

35. The important events of the year were the appointment of the Deputy Director of Agriculture for live-stock, the taking over of the Pumping and Boring section of the Department of Industries to form a basis of an Agricultural Engineering section of the Agricultural Department and the transfer of this department from the control of the Board of Revenue to that of the Government direct. All the ten agricultural stations were at work and four new stations were opened in the South Kanara district for the study of coconut cultivation. Land for a sheep and seed farm was taken over from the Forest Department in the Bellary district. The distribution of varieties of sugarcane suited to the several tracts continues. Seed farms for the multiplication of these varieties have been organized and improvements in cultivation, in crushing canes and in the manufacture of jaggery are being introduced. The use of green-manure crops and of superphosphate, bonemeal and fishmanure for paddy was encouraged and is spreading. Satisfactory progress has been made in connexion with the eradication of the palmyra disease in the Gōdāvari district and the spraying of arecanut trees against mahali disease in Malabar and of mango trees against the mango-hopper in the Chittoor district was carried out. Work against smut on Italian millet, cumbu

and cholam was continued in Bellary and Kurnool. The effort made in conjunction with the department by those interested in maintaining the superiority of Tinnevelly cotton by the eradication of pulichai cotton was continued and met with considerable success. In Tinnevelly much progress was made in the organization of seed unions for co-operative ginning and sale of pure strains of Tinnevelly cotton. The soil survey of the Kistna delta was completed and the sample soils were partly analysed. The Government Economic Botanist continued his work of evolving and preliminary testing of new strains of better paddy. Two Agricultural Co-operative Societies were newly formed in the Madura and Ramnad districts. At Tinnevelly an Agricultural Improvement Society was started which is already showing signs of useful activity.

Civil Veterinary Department. *Part II, paras. 232 to 236.*

36. Fourteen graduates of the Veterinary College were added to the staff which consisted of 12 veterinary inspectors and 105 assistants. One veterinary inspector and 2 assistants were on military duty. There was a large increase in deaths from contagious diseases, 26,215 animals having died of rinderpest. The number of inoculations performed against this disease was 100,463. During the year a new hospital was opened at Mangalore and a dispensary at Madanapalle. The mobile corps was disbanded and the six assistants comprising the corps and seven more men were posted to taluks along the Hyderabad border. The net expenditure of the department was Rs. 2·42 lakhs.

Weather and Crops. (Fasli 1326.)* *Part II, paras. 237 and 238.*

37. The rainfall during the south-west monsoon was above the average in all the districts except Ganjām and South Arcot, and proved favourable to agricultural operations except in Cuddapah and Tinnevelly. During the north-east monsoon also, the rainfall was above the average in the majority of districts. The area under cultivation exceeded the normal extent by 1·64 per cent. The areas under paddy, groundnut, castors, sugarcane, indigo and tobacco showed an increase, while those under cholam, cumbu, ragi, gingelly and cotton decreased. In last year's report reference was made to the fact that the outturn of crops as reported by Collectors was unreliable being generally an underestimate. A more accurate estimate has since been made which shows that during the year under report the outturn was at or above the normal in the majority of cases.

Horticulture. *Part II, para. 239.*

38. At the instance of the Hon'ble the Surgeon-General, an effort was made to revive the cultivation of drug plants. The work of improving the turf was continued in Sim's Park, a quantity of jungle was cleared, an endeavour was made to cover the bare stems of trees with climbing plants and new species of trees were planted. The orchard was greatly extended and a number of fruit trees imported from Australia. The mangosteen crop in Burliyar was a record one. The cocoa trees also produced good crops of fruit and the beans were sold to the East India Chocolate Factory. It is believed that this is the first time that cocoa and chocolate have been grown and manufactured in India. The Para rubber trees at Kallar were tapped and rubber valued approximately at Rs. 500 was collected. The receipts in all were Rs. 6,389 and the expenditure was Rs. 28,375.

Government Botanical Gardens and Parks, the Nilgiris.

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* 1st July 1916 to 30th June 1917.

The Agri-Horticultural Society, Madras. (1916.)

39. There was a further decline in subscriptions to the Society, but the year closed with a balance in hand. The annual flower-show was successful except from a financial point of view.

Government Cinchona Plantations.
Part II, paras. 241 and 242.

40. The only extension in the year under cinchona was a small experimental plot of 4·92 acres, planted with *cinchona officinalis*, at Dodabetta. The area under cultivation at the close of the year was 1,684·91 acres. The crop harvested was considerably smaller than that taken in the previous year. The bark used in the factory consisted of Java-grown *ledgeriana*, locally purchased and plantation-grown *officinalis* and hybrid bark. The percentage of quinine extraction showed a marked increase, while the outturn of quinine exceeded by 60 per cent the highest previous output of the factory. The cost of manufacture per pound of quinine was consequently less than that of the previous year. Another feature of the year's work was the large amount of quinine salts other than quinine sulphate which were manufactured, principally to supply the needs of the armies operating in the East. 13,000 lb. of quinine in various forms were sent to the army in Mesopotamia. The extensions to the factory buildings were completed, but the necessary plant is not yet installed. The receipts exceeded the expenditure by Rs. 5,15,673.

Fisheries.
Part II, paras. 243 to 247.

41. For the West Coast experimental stations the year was better than in 1915–16 but not very favourable. The experiments in mackerel pickled either plain with salt or with condiments, are being successfully developed. The cannery also did better than in the previous year and over half a lakh of tins of various sizes were packed. As regards inland fresh water fisheries the chief operations were the Sunkesula fish farms, the hilsa hatchery on the Coleroon, the stocking of an increased number of tanks, the starting of the Ippur fish farm (Nellore district) mainly for larvicides and the continuance of trout operations on the Nilgiris. The chank work was carried out as in the previous year but with a larger net profit than has ever been attained from chanks ; nothing was received from pearls during the year. The lagoon fish farm at Tuticorin, the biological specimens sold to various colleges, the revived *bêche-de-mer* industry, all yielded substantial profit, but the Pulicat oyster farm showed a small loss. Socio-economic work was undertaken. Two co-operative societies were in existence at the beginning of the year on the West Coast and four more were started during the year, with preparation for several others. During the year 12 tons of fish-oil soaps and 32 tons of " Washwell " and 12 tons of " Vegetol " soaps, besides a small quantity of milled toilet soap, were made. The various qualities of soap manufactured by the department have a good market, large quantities of " Coal Tar " soap having been ordered by the military authorities. As the glycerine recovery plant ordered from England has not arrived, glycerine could not be recovered except to a small extent. An important proposal was made to Government by this department to take over all the Government fish-curing yards from the Salt Department.

Forests. (Fasli 1326.)*
Part II, paras. 248 to 264.

42. In pursuance of the policy recommended by the Forest Committee 44 square miles of reserves were disafforested, the greater part of the area being in the districts of Bellary, the Nilgiris and Cuddapah. In Upper

Area.

* 1st July 1916 to 30th June 1917.

Gōdāvari, where there are very large unreserves, 4 square miles were notified under section 16 of the Act. The total area of reserved forest was 18,810 square miles at the close of the year, a net decrease of 35 square miles. Working-plans providing for an area of 494 square miles were sanctioned during the year; and plans for 1,805 square miles were under preparation. The most important working-plans now under preparation are those for the sāl forests of Ganjām, the teak plantations of Nilambūr, and the Mount Stuart forests in the Anamalais. Working-plans for the Tekkadi leased forests and the adjacent Ulandi forests are nearing completion. Other working-plans sanctioned during the year were the Hosūr sandalwood working-plan in North Salem, and the revised working-plan for the fuel forests of Madura. There are still 7,000 square miles of forest for which no working-plans have been prepared, and many of the existing plans are either defective and require revision or are nearing the end of the period for which they were framed. But, owing to the number of forest officers away on military duty, satisfactory progress in this most important branch of work cannot be expected at present. Expenditure on buildings was restricted to absolutely essential requirements, and shows a reduction from Rs. 1·32 to Rs. 1·02 lakhs. Expenditure on roads and bridges being frequently remunerative rose from Rs. 1·08 lakhs to Rs. 1·62 lakhs. The chief works on which expenditure was incurred during the year under the head of buildings were quarters and offices for subordinates; under roads and communications, an extension of the Mount Stuart tramway for ten furlongs. The working of this tramway for the year showed a profit of Rs. 11,192 compared with Rs. 1,441 in the previous year. The Srīharikōta tramway transported 3,765 tons of fuel as against 1,518 tons in the previous year. The first five miles of the Alangayam-Komattiyur Ghat road were completed and work on the other sections carried out at a cost of Rs. 47,457. The alignment of the Nadanur-Amerdi road was selected, and the Forest Engineer completed the field work of the Tekkadi tram trace. In all, 403 miles of forest roads have been constructed during the year.

Working-plans.

Communications and buildings.

43. There was a satisfactory decrease in crime from 34,456 cases to 31,810. This is attributed to better supervision, to the satisfactory working of the patrol system, to the extension of forest panchayats and to the kancha system. More than half the cases were compounded, and only 7,438 actually disposed of by magistrates. Of these nearly 94 per cent ended in conviction. The season was favourable for protection against fires, and there was a decrease in the number of offences and in the area burnt. Instances of deliberate incendiarism occurred in the Anantapur and Cuddapah districts, and in some cases reserves were closed to grazing, grazing fees enhanced, and the privilege of free removal of grass was withdrawn in consequence. The area over which special protection was attempted was 7,213 square miles, of which 861 square miles were burnt, a percentage of failure of 11·9 as compared with 17 last year. The "Forest village" system in the Javadis, under which the villagers are granted various privileges including free grazing in return for protection of the forests, was further developed and worked well. In Kurnool, Chenchus were successfully employed on fire-protection and in Gōdāvari and Coimbatore the co-operation of the hill-men was secured in preventing fires.

Protection of forests.

Fire protection.

The number of cattle impounded during the year showed a decrease of 32,641 compared with the previous year. In some parts this is attributed to a decrease in illicit grazing due to better supervision.

Sylviculture and exploitation.

44. In Kurnool the teak plantations established for the reclamation of the Chenchus were maintained and an additional area of 45 acres was planted. In all, cultural operations were carried on over an area of 11,093 acres compared with 2,376 acres in the previous year, and regular planting was done in 100 acres at a cost of Rs. 5,411. The question is under consideration whether more planting should not be undertaken by the department, avoiding the waste of money which occurred in the past by concentrating on favourable localities and insisting on continuity of policy. In the matter of exploitation also it is becoming clear that the department must lead the way if the forests are to be properly developed.

Finance.

45. The gross revenue was Rs. 47,79,016 and the expenditure Rs. 27,84,374, leaving a net surplus of Rs. 19,94,642, the highest on record. This result is due to rigid economy and postponement of necessary expenditure and also to an increase in the revenue from sandalwood, to leases of *cassia auriculata* and *cassia fistula*, and also to the sale of reserved forests which have been given up.

General.

46. The position of the District Forest Officer as head of his department in the district has recently been defined by Government and the classification of all the forests of the Presidency in accordance with the recommendations of the Forest Committee has now been completed. There has been a satisfactory increase in the number of forest panchayats which are reported to have worked well on the whole. The kancha system in Nellore continued to develop. During the year a special officer has been appointed with a view to gain the confidence of the Chenchus, secure suitable employment for them and prevent crime. Mr. A. W. Lushington, C.I.E., retired Conservator of Forests, was employed as Special Assistant to the Forest Commissioner to investigate the possibility of more commercial exploitation of the forests. A new departure was made in handing over the revenue administration of the hill villages in the Javadis to the Forest Department. The Forest College continued to work satisfactorily, and the fourth batch of 28 men left the college in June 1917.

Mines. (1916.) *Part II, paras. 265 and 266.*

47. Compared with the previous year, the output of minerals worked showed a slight decrease under gold in Anantapur and a marked increase under manganese in Vizagapatam, magnesite in Salem and mica in Nellore. No diamonds were extracted during the year. The condition of the employees was generally good. There were four fatal accidents during the year—all in Anantapur.

Manufactures. *Part II, paras. 267 to 269.*

48. The natural protection afforded to local industries by war conditions has not led to such a large increase of manufactures as might have been expected, chiefly owing to the difficulty of getting machinery and experts from home. However, the number of factories under the Indian Factories Act rose during the period under report from 417 to 460, the new concerns being chiefly rice mills and cotton ginning works. Weaving mills have done well with army orders, but the hand-loom industry suffered a set-back owing to the high price of yarn and the scarcity of dyes. The tanning trade was busy with military work, but

the scarcity of bark for the tanning of hides made it necessary for the Government of India to prohibit the tanning of skins. The leather trade did well, and the coir industry has just managed to keep going. Scarcity of transport on sea and land was felt in every branch of trade. A feature of the year was the recrudescence of ship-building, nine wooden ships averaging 200 tons each having been built on the West Coast. The Department of Industries is making pencils on a commercial scale, but the experiments in glass and lime sand bricks have been closed down. The Factories Act continued to work smoothly, and the staff managed to maintain a very fair standard of inspection in spite of the increase in the number of factories.

Sea-borne trade. *Part II, paras. 270 to 290.*

49. The total value of the sea-borne trade of the Madras Presidency was nearly Rs. 5,455 lakhs, showing an increase of Rs. 569 lakhs, or 12 per cent, as compared with that of the previous year. Foreign trade continued to feel the effects of the war and in view of the difficulties of obtaining tonnage and the very high rates of freight, coupled with the restrictions extended to most commodities and exchange difficulties, it is remarkable that the total value of the sea-borne trade exceeded that of the average for the five years immediately preceding the war. It must be borne in mind, however, that this increase was largely due to the high prices prevailing and that the volume of trade borne by sea was in most cases materially less than in previous years. The trade of the United Kingdom with Madras increased both in imports and exports, and this is also true in the case of the United States of America and Japan. Foreign trade including Government transactions improved by Rs. 531 lakhs or 14 per cent and coasting trade by Rs. 38 lakhs or 3 per cent. Under foreign trade imports advanced by Rs. 165·49 lakhs or 13 per cent and exports by Rs. 366·10 lakhs or 14 per cent. The chief port registered a total trade of Rs. 2,614·18 lakhs against Rs. 2,108·34 lakhs in the preceding year, an increase of Rs. 505·84 lakhs or 24 per cent, representing 45 per cent of the aggregate trade of the Presidency, as compared with 42 per cent in 1915-16. The total trade of the outports amounted to Rs. 2,840·79 lakhs compared with Rs. 2,777·45 lakhs in the previous year. To this total the ports of Tuticorin, Cochin, Dhanushkodi, Calicut, Mangalore, Negapatam, and Cocanada each contributed more than Rs. 100 lakhs. The trade of all these ports with the exception of the last two has improved, particularly that of Tuticorin, Dhanushkodi, Calicut and Mangalore which rose by 8, 24, 13 and 21 per cent respectively. The trade of Negapatam declined by 15 per cent and that of Cocanada by 40 per cent. There was an expansion of Rs. 132·39 lakhs or 11 per cent under imports of private merchandise, due to increased values under cotton manufactures, paper and pasteboard, cotton twist and yarn, motor vehicles, spices, metals, chemicals and sugar, partly counterbalanced by decreased imports of railway materials, matches and cement. The total value of imports of cotton goods, which represent 33 per cent of the total foreign imports, increased by 17 per cent. The chief feature of the year was the speculative purchases of coloured yarns and goods owing to the general view that the scarcity of dye stuffs would cause a considerable rise in the prices of dyed goods. Large stocks were carried forward from the previous year's purchases and these, together with the continual rise of prices in Manchester, tended to reduce the imports in grey and white

Imports.

piece-goods. The increase under paper and pasteboard and metals was the result of inflated prices, whereas the quantities imported declined. There was an expansion of 11 per cent in the value of imports of sugar due to larger supplies of unrefined sugar from the Philippines in consequence of shortage under refined sugar from Java. Exports of country produce improved by Rs. 132·89 lakhs or 5 per cent, and if the figures for the tanned cow-hides shipped under Government control from September 1916 be added, the total exports show an increase of 13 per cent. The increase in value chiefly occurs under leather, raw cotton, oils, drugs and medicines, raw skins, raw rubber, spices and sugar, while decreases were recorded under grain and pulse, seeds, indigo, coffee and cotton twist and yarn. Under leather, increased demand for war materials and higher prices at home improved the trade in tanned hides by 54 per cent and the high prices obtainable for goat and sheep skins owing to an extraordinary demand from Europe and America prompted tanners to tan skins on a far larger scale which increased the value of shipments of tanned skins by 88 per cent. The increase of 37 per cent in the value of exports of raw cotton and of 75 per cent under raw skins was due to an abnormal rise in the price of these articles. High prices under coconut oil and larger shipments of essential, castor and groundnut oils improved the trade under oils, the exports of which rose by 45 per cent in value. The larger crops of rubber and sugarcane gave rise to larger shipments of raw rubber and sugar. On the other hand, there was a decline of 19 per cent in the exports of rice and paddy to Ceylon. Under seeds there was a fall of 25 per cent owing chiefly to reduced shipments of groundnuts. The decline under exports of indigo was 38 per cent. Large stocks in London and high local prices of indigo coupled with high freight rates restricted trading. The decline of 18 per cent under coffee was due to high freights. There was a fall in the shipments of cotton twist and yarn as the demand from Shanghai was not maintained.

Exports.

Trade according to countries.

50. The trade with the United Kingdom represented 48 per cent of the total trade as compared with 47·33 per cent in 1915–16 and expanded by Rs. 152·54 lakhs or 9 per cent. If we include the tanned cow-hides shipped under Government control, the total trade would show an expansion of Rs. 331·17 lakhs or 19 per cent. The trade with the British Empire, representing 75 per cent of the aggregate trade of the Presidency, improved by 6 per cent. The trade with the continent of Europe showed a decline of Rs. 68·22 lakhs or 16 per cent. Japan mainly contributed to the increase of Rs. 92·41 lakhs or 43 per cent in the trade with the Asiatic ports. The trade with Africa improved by Rs. 3·40 lakhs on account of larger shipments of rice to Réunion and that with America, which was practically confined to the United States, improved by Rs. 76·25 lakhs or 35 per cent.

Coasting Trade.

51. The total value of coasting trade excluding Government transactions improved by Rs. 26·82 lakhs or 2 per cent. There was an increase of Rs. 72·01 lakhs or 15 per cent under exports and a decrease of Rs. 45·19 lakhs or 7 per cent under imports. Imports of private merchandise declined by Rs. 47·57 lakhs or 7 per cent owing to smaller imports of grain and pulse, while exports improved by Rs. 69·51 lakhs or 14 per cent in consequence of larger shipments of coffee, coconuts, groundnut oil, manures, sugar, seeds and spices.

Shipping.

52. The total number of vessels engaged in the foreign trade which entered and cleared was 4,161 with an aggregate tonnage of 2,283,772 compared with 3,880 of 2,626,735 tons in 1915-16. The average tonnage per vessel for the year was 549 or 128 tons less than that of the previous year. The number of vessels (excluding native craft) under the British flag which entered and cleared was 2,814 with an aggregate tonnage of 2,059,580 against 2,773 of 2,315,119 tons in the previous year. The number of vessels under foreign colours was 58 with a tonnage of 135,761 against 87 of 247,636 tons in 1915-16. The number of vessels in the coasting trade increased from 25,413 to 26,179, but their tonnage declined from 7,086,420 to 5,299,032.

Public Works—General. *Part II, paras. 291 to 294.*

53. The services of 19 officers and upper subordinates of the department were placed at the disposal of the Army Department for military duty during the year, thus bringing the total number to 39, since the beginning of the war. One officer was killed in action, two others were wounded and have been awarded the Military Cross. Certain redistributions of territorial charges were effected, the most important being the abolition of the Tank Restoration Scheme Division, Fourth Circle, the works belonging to which were distributed among other circles. The estimated total cost of major works under execution and the actual outlay on works in progress show a decrease on that of last year, due to war conditions. There was a general decrease in the value of the outturn of the workshops at Dowlaïshweram and Bezwada, due mainly to the present financial stringency; but the workshops at Madras showed an increase. Though the manufacture of high explosive shells in the Public Works Workshops was discontinued, the making of drag-hooks, curry-combs and other minor works for the Military Department was undertaken extensively. The total receipts of goods obtained for the Public Works Stores, Madras, were considerably higher than in previous years and this may be attributed to the abnormal prices prevailing and also to large supplies made to the Military Department for war purposes.

Railways. *Part II, paras. 295 to 298.*

54. The Tirutturaippūndi-Vēdāranniyam railway of the Tanjore District Board measuring 23 miles and the Suramangalam-Salem railway of the Salem District Board measuring 4 miles were completed during the year, but the lines could not be opened for traffic owing to the deficiency of rolling-stock and the difficulties caused by the war. The surveys of the Kollengode-Trichur, Trichinopoly-Jayankondasōlapuram and Mangalore-Panemangalore lines were also completed. The Quilon-Trivandrum railway was under construction by the South Indian Railway on behalf of the Travancore Darbar. The Mysore State being anxious to get a connexion with the West Coast, an officer of the Railway Board was appointed to frame a scheme of railway extension between a port on the West Coast and the hinterland including Coorg and the adjacent parts of Mysore and British territory. That officer investigated the following lines : (*a*) Shimoga to Bhatkal or Venkatapur, (*b*) Hassan to Mangalore, (*c*) Yedatore via Fraserpet to Tellicherry, (*d*) Nanjangud to Erode. The Attur-Tirumandorai and Attur-Perambalūr railways were also investigated by the South Indian Railway as alternatives to the proposed Attur-Chinnasalem railway. The Government, however, recommended that the Attur-Chinnasalem railway should be taken up first. Owing to the war,

work on the construction of the Tinnevelly-Tiruchendūr railway had to be suspended. The surveys of the Palamcottah-Panaigudi and the Shōranūr-Manantoddy railways and the final location surveys of the Māyavaram-Tranquebar and Manamadura-Sivaganga railways could not be carried out owing to lack of staff. There were three collisions and two derailments during the year. On the night of the 22nd and 23rd November 1916 a cyclone caused the South Indian Railway boat mail and the Tuticorin express to capsize. Seventeen passengers were slightly injured. The Tanjore and Kistna District Board railways realized a net profit of 6·58 and 9·45 per cent, respectively, on capital outlay, while the Pōdanūr-Pollachi railway made a profit of 7·82 per cent, and the Tenali-Rēpalle line realized 3·75 per cent.

Tramways. *Part II, para. 299.*

55. There was only one electric tramway—that in the Presidency town—and it conveyed 20 million passengers against 19 millions in the previous year. The company worked nearly 15 miles of track.

Canals. *Part II, paras. 300 and 301.*

56. The ton mileage, the value of goods and the number of passengers carried on canals fell considerably ; in the previous year's comparison the ton mileage and the value of goods had increased and the number of passengers fallen.

Irrigation. *Part II, paras. 302 to 316.*

57. The outlay incurred on irrigation works was Rs. 9·54 lakhs less than in the previous year. The area irrigated under all classes of irrigation works fell by about 99,000 acres with a consequent decrease in revenue of Rs. 12·52 lakhs.

Major Protective Works.

The expenditure on Class I—Major Protective Works—Capital Account was incurred mainly on the Mopad project in the Nellore district and the Bhavanasi project in the Guntūr district. The Rushikulya system is the only system in operation at present under this head and it worked at a loss of Rs. 57,612 for the year.

Major Productive Works.

The expenditure on Major Productive Works—Capital Account was incurred chiefly on the Gōdāvari and the Kistna delta systems, the Kurnool-Cuddapah canal, the Toludur project and the Cauvery delta system. The area charged as irrigated under this class of works was about three and a half million acres and the revenue gave a return of 6·54 per cent on the capital outlay or 9·88 per cent if the Kurnool-Cuddapah canal, which failed to prove productive, be excluded.

Minor Works.

The area irrigated under "Minor Works for which Capital and Revenue accounts are kept" was 357,000 acres and the net revenue derived therefrom gave a return of 2·18 per cent on the capital outlay. Under the Tank Restoration Scheme, the average area of cultivation under the works that are to be investigated is about 2·25 millions of acres ; up to the end of the year works supplying 52·28 per cent of the area had been investigated and the year's expenditure was Rs. 4·07 lakhs.

Investigation of Projects.

It was decided to keep the Kistna reservoir project in abeyance until a decision was come to in respect of the Cauvery reservoir project.

V.—REVENUE AND FINANCE.

General Revenue and Expenditure. *Part II, paras. 317 to 319.*

58. The gross revenue of the Presidency, both Imperial and Provincial, rose from Rs. 1,952¾ lakhs in 1915–16 to Rs. 2,084 lakhs in 1916–17, but the gross expenditure charged to Revenue fell from Rs. 871 lakhs to Rs. 850½ lakhs. The surplus of the year amounted to Rs. 1,233½ lakhs and exceeded

that of the previous year by Rs. 151¾ lakhs, owing chiefly to an improvement in the net State Railway receipts (Rs. 30½ lakhs) and in the revenue derived from Salt (Rs. 12¾ lakhs), Excise (Rs. 20¾ lakhs), Customs (Rs. 28¼ lakhs) and Income-tax (Rs. 19½ lakhs), as well as to the curtailment of expenditure by Rs. 21½ lakhs, mainly under Sanitation (Rs. 16½ lakhs).

Imperial Revenues. *Part II, paras. 320 to 332.*

59. The receipts from Land Revenue amounted to Rs. 350 lakhs and were almost the same as those of the previous year. The Customs revenue amounted to Rs. 107¾ lakhs, being Rs. 28¼ lakhs more than that of the previous year, the increase occurring mostly under "Sea Customs—Import duty," owing partly to the enhanced rates of duty leviable under the revised tariff of March 1916 and partly to the high prices prevailing. The Salt revenue advanced from Rs. 115¾ lakhs to Rs. 128¾ lakhs; the rise of Rs. 13 lakhs was mainly under Excise duty owing to the enhanced rates of duty and to increase in sales. The charges rose from Rs. 15¾ lakhs to Rs. 17¾ lakhs, chiefly under Salt purchase and freight, owing to larger production of salt and to the execution of works in connexion with the extension of salt manufacture. The quantity of salt manufactured during the year was 131 lakhs of maunds against an average outturn of 90 lakhs of maunds in the preceding three years. The total issues for home and inland consumption amounted to 126 lakhs of maunds against 113½ lakhs of maunds in the previous year. The Stamp revenue rose from Rs. 75½ lakhs to Rs. 78 lakhs; and the charges amounted to Rs. 2¼ lakhs against Rs. 2 lakhs in the previous year. The total Opium revenue realized by the Excise Department improved from Rs. 14½ lakhs to Rs. 15¾ lakhs of which Rs. 5 lakhs represented the cost price of opium which was raised from Rs. 8–8–0 to Rs. 11 per seer on the 1st April 1916. The Excise revenue amounted to Rs. 175¼ lakhs against Rs. 165 lakhs in 1915–16 and the improvement was mainly under country spirits and toddy, owing to an increase in consumption due to the favourable season. The charges were Rs. 9 lakhs against Rs. 9¼ lakhs in the previous year. Income-tax receipts increased from Rs. 20¼ lakhs to Rs. 30 lakhs, owing mainly to the enhanced rates of tax introduced from 1st April 1916. Imperial revenue from other sources amounted to Rs. 420¼ lakhs and exceeded the corresponding revenue of 1915–16 by Rs. 32¼ lakhs; this was mainly contributed by State Railway receipts. The expenditure under other Imperial heads amounted to Rs. 64 lakhs and was less than that of the preceding year by Rs. 7¼ lakhs, chiefly under subsidized Companies (Rs. 3 lakhs) and under Civil Works in charge of Public Works Officers (Rs. 2¼ lakhs). The capital outlay on State Railways and Irrigation Works not charged to Revenue amounted to *minus* Rs. 5 lakhs against Rs. 28¼ lakhs in the previous year. The decrease occurred under State Railways—mostly on the South Indian Railway, owing to a considerable reduction in the balances of stores, caused mainly by the restrictions imposed on purchases both in England and in India.

Land Revenue.*

Customs.

Salt.

Stamps.*

Opium.

Excise.*

Income-tax.*

Other Imperial Revenue and Expenditure.

Capital Expenditure not charged to Revenue.

* The receipts from LAND REVENUE and the receipts and charges under STAMPS, EXCISE (including the realizations of opium revenue by the Excise Department) and INCOME-TAX are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share.

Provincial revenues. *Part II, paras. 333 to 341.*

60. The Provincial account opened with a balance of Rs. 110 lakhs and closed with a balance of Rs. 152 lakhs ; the surplus of Rs. 42 lakhs was the net result of an aggregate revenue of Rs. 794½ lakhs and an expenditure of Rs. 752½ lakhs. The receipts from Land Revenue amounted to Rs. 350 lakhs and were almost the same as those of the previous year. The charges were Rs. 122¾ lakhs against Rs. 123½ lakhs in the previous year. The receipts from Stamps, Excise (including the share of Opium revenue) and Income-tax amounted respectively to Rs. 78 lakhs, Rs. 186 lakhs and Rs. 30 lakhs against Rs. 75½ lakhs, Rs. 175½ lakhs and Rs. 20¼ lakhs in the previous year. Explanations of the increases under the last two heads are given in the Imperial section. The corresponding charges were Rs. 2¼ lakhs, Rs. 9 lakhs and Rs. 33,080 as against Rs. 2 lakhs, Rs. 9¼ lakhs and Rs. 30,281, respectively, in the previous year. The receipts of the Forest Department increased by Rs. 5 lakhs to Rs. 46 lakhs ; the improvement was mostly under timber and other produce, since the market improved and better prices were realized. The charges amounted to Rs. 28½ lakhs against Rs. 29¼ lakhs in the previous year. The receipts under Registration rose from Rs. 23¼ lakhs to Rs. 24¾ lakhs, and the charges from Rs. 12·56 lakhs to Rs. 13·12 lakhs owing mainly to the raising of the minimum pay of clerks in registration offices. The receipts under the other Provincial heads amounted to Rs. 63½ lakhs and were higher than those of the previous year by Rs. 3¼ lakhs, chiefly under Scientific and Miscellaneous Departments—Cinchona Plantations and Fishery receipts. The expenditure under other Provincial heads declined by Rs. 14¼ lakhs to Rs. 576½ lakhs. There was a decrease of Rs. 31¼ lakhs under twelve heads and an increase of Rs. 17 lakhs under eleven other heads. The largest decrease occurred under Sanitation (Rs. 16½ lakhs). The more important increases were under Education (Rs. 6 lakhs) due chiefly to larger payments of subsidies and grants-in-aid, and under Police (Rs. 4¾ lakhs) owing mainly to the revision of the pay of the constabulary.

Land Revenue.*

Stamps, Excise and Income-tax.*

Forests.

Registration.

Other Provincial receipts and expenditure.

Local Funds. *Part II, paras. 342 to 345.*

61. The receipts and charges of Local Funds constituted under Act V of 1884 exclusive of debt transactions were Rs. 179¾ lakhs and Rs. 189¼ lakhs, respectively, leaving a deficit of Rs. 9½ lakhs against a deficit of Rs. 16¾ lakhs in the preceding year. The receipts and charges on account of debt transactions amounted to Rs. 50¾ lakhs and Rs. 38¾ lakhs respectively.

Port and Marine Funds. *Part II, paras. 346 and 347.*

62. The Madras Port Fund opened with a balance of Rs. 5,584 on 1st April 1916 and closed with a balance of Rs. 15,348. The income of the fund amounted to Rs. 97,666 and its expenditure to Rs. 87,902. The Minor Ports Fund opened with a balance of Rs. 1,83,114 and closed with a balance of Rs. 1,70,880 ; the receipts and charges of the fund were Rs. 6,77,706 and Rs. 6,89,940, respectively. The total security balance of these funds stood at Rs. 8,57,400 (face value) on the 31st March 1917. The income and expenditure of the Pilotage funds amounted to Rs. 11,364 and Rs. 10,434, respectively, the invested balance of the funds amounting to Rs. 1,72,500 (face value). The receipts and charges of the Landing and Shipping Funds came to Rs. 6,69,785 and Rs. 5,68,160, respectively, and

* The receipts from LAND REVENUE and the receipts and charges under STAMPS, EXCISE (including the realizations of opium revenue by the Excise Department) and INCOME-TAX are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share.

the invested balance at credit of the funds was Rs. 3,35,900 (face value). The Madras Coast Lights Fund opened with a balance of Rs. 16,853 and closed with a balance of Rs. 31,224, the invested balance of the fund being Rs. 50,000 (face value) on the 31st March 1917.

Municipal Revenues. *Part II, para. 357.*

63. The receipts and charges of mufassal municipalities amounted to Rs. 87·30 lakhs and Rs. 92·74 lakhs respectively. The receipts and charges of the Madras Corporation were Rs. 46·46 lakhs and Rs. 46·34 lakhs respectively and the balance to the credit of the Corporation at the end of the year was Rs. 9·40 lakhs.

The Abkari Department. *Part II, paras. 358 to 364.*

64. The general prosperity of the people during the year is reflected in the increased consumption of intoxicants. In spite of a considerable reduction in the number of country liquor shops, the rentals rose from Rs. 44·32 lakhs to Rs. 45·79 lakhs, while consumption increased by 10 per cent. Similarly, though there were about 600 fewer toddy shops, the rentals rose from Rs. 88·94 lakhs to Rs. 90·98 lakhs, while the tree-tax produced five lakhs more than in 1915–16. Decreased imports of foreign liquor were offset by increased local production. Attempts to encourage tea and coffee shops as a counter-attraction to the toddy shop have not been very successful. Something has been done to remove liquor shops away from places where they are a temptation to the wayfarer. There was during the year a slight decline in the number of shops for the sale of opium and intoxicating drugs but rentals rose.

VI.—VITAL STATISTICS AND MEDICAL SERVICES.

Vital Statistics. (1916.) *Part II, paras. 366 to 372.*

65. Vital statistics for 1916 were furnished for a population of only 40,005,735. The birth-rate during the year was 32·5 per mille against 31·2 in 1915. Excluding Madras which had a birth-rate of 42·1 per mille, the highest birth-rate was recorded in Guntūr (41·0) and the lowest in Ramnad (24·0). As usual births exceeded deaths in all districts and there were more boys born than girls. Racially considered, Muhammadans returned the largest birth-rate of 36·2 per mille. Deaths registered during the year represented an annual ratio of 21·9 against 22·0 per mille in 1915. Excluding Madras which had a death-rate of 34·9 per mille, the highest death-rate in the mufassal was returned by Bellary (26·3) and the lowest by Ramnad (15·4). The death-rate in the mufassal among children under one year of age was 182·8 per mille of registered births against 186·6 in 1915. The Madras Registration of Births and Deaths Act III of 1899 was in force in 310 unions and 2,349 villages. Fevers as usual continued to be the chief classified cause of death, accounting for 292,491 deaths. Cholera claimed 16,735 victims, small-pox 21,903, plague 11,498, dysentery and diarrhœa 58,444 and respiratory diseases 43,814.

Emigration and Immigration. (1916.) *Part II, paras. 373 and 374.*

66. During the year 1916, recruitment was less active as regards Fiji and British Guiana. It was resumed in the case of Jamaica. The number of persons embarked was for Fiji 950, British Guiana 387, Trinidad 909 and Jamaica 258. There was an increase in the number of persons that proceeded to the Straits Settlements and a decrease in the number that returned, and this was due chiefly to greater demand for labour and to the good wages offered in the Malay States. The number of persons that returned from Burma declined with the number that went across, much

of this emigration being seasonal. The arrivals from Ceylon were more or less in proportion to the number who went there.

Medical Relief. (1916.) *Part II, paras. 375 to 378.*

67. The total number of medical institutions at the end of the year 1916 was 709, and medical relief was afforded to nearly $8\frac{1}{4}$ million patients. The percentage of deaths among in-patients fell from 4·54 in 1915 to 4·11 in 1916. The most common diseases treated were diseases of the skin, diseases of the digestive system, eye diseases, malaria, injuries (general and local), diseases of the generative system and venereal diseases. The proportion of patients operated on to the total treated remained practically the same, about 4 per cent. The nature of the operations has also varied but little from year to year, the most common being operation for abscesses, operation on skin and subcutaneous tissues, operation on male generative organs, and obstetrical operations. There was an increase in the total number of operations performed during the year. Of the operations performed 99 per cent were successful. There are at present 29 appointments for house surgeons and house physicians in the Presidency State hospitals and in certain selected headquarter and other hospitals in the mufassal.

Medical College and Schools. *Part II, paras. 379 to 381.*

68. The total number of students in the Medical College and Schools was 997 during 1916–17 against 859 in the previous year. The increase was due to the admission of 30 additional pupils into the Royapuram Medical School on 1st July 1916 and also to the opening of a new Medical School of 25 pupils at Calicut. A temporary shed for the practical Biology and Physics classes of the Medical College has been completed and certain other improvements to the lecture theatres are being effected to provide accommodation for a larger number of students.

The Pasteur Institute, Coonoor.* *Part II, para. 382.*

69. The number of patients treated during the year was 1,707, exceeding the record figure of last year by 217. Of the total number 1,546 were Asiatics, the rest being Europeans and Anglo-Indians. Four patients died during treatment, 5 within a fortnight after the completion of the treatment, and 15 more than a fortnight afterwards. The latter cases are considered as failures.

Lunatic Asylums. (1916.) *Part II, para. 383.*

70. The accommodation provided in the three Lunatic Asylums remained the same as in 1915. The daily average population was 832·68, the females numbering nearly one-fourth of the total. The commonest form of insanity was as usual mania. The general health of the patients was better than last year, the daily average sick in hospital being 79·49 as compared with 103·15 in 1915.

Sanitation. (1916.) *Part II, paras. 384 to 386.*

71. During 1916, 26 municipal towns had piped water-supplies. The minor sanitary works completed during the year consisted of the construction and repair of wells and tanks, markets, slaughter-houses and latrines and general sanitary improvements. There was a fall in the numbers of totis and sweepers, but an increase in the conservancy plant employed. The number of public latrines increased and there was a slight increase in the number of private latrines. Sewage farming did not show much improvement. Town-planning operations also received less attention during the year. Itinerating dispensaries for the treatment of malaria and other ailments worked in the districts of Chittoor,

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* 1st March 1916 to 28th February 1917.

Ganjām, Gōdāvari, Kurnool and Vizagapatam. It was only in Madras City that a systematic anti-malaria campaign on a pretty large scale was conducted under the supervision of a special officer. In combating cholera epidemics in rural areas, much good work was done by the four Provincial cholera parties on duty.

Vaccination. *Part II, para. 387.*

72. The total number of vaccinations performed by all agencies showed a decline as compared with the previous year. The percentage of success both under primary and re-vaccinations also fell.

VII.—INSTRUCTION.

General. *Part II, para. 389.*

73. Pending the issue of final orders on the scheme for the general reorganization of the inspecting agency, sanction was again accorded by Government for the retention for another year of 49 additional Sub-Assistant Inspectors and the additional Sub-Assistant Inspectresses. No change of any importance was made in the Madras Educational Rules and the Grant-in-Aid Code during the year. The educational institutions conducted or controlled by hostile missions continued to be under the management of the Missionary Educational Council of South India, pending a final decision as to the eventual management and ownership of these schools.

General Statistics and Finance. *Part II, paras. 390 and 391.*

74. Public institutions increased both in number and strength, the percentage of increase being 2·6 and 2·8 respectively. The percentage of boys under instruction to the male population rose from 6·4 to 6·5 and the corresponding percentages for girls were 1·49 and 1·55. Including the charges relating to institutions under the control of other departments, the total expenditure on education increased from Rs. 206·5 lakhs to Rs. 216·9 lakhs, towards which public funds contributed 52 per cent. Imperial grants, both recurring and non-recurring, amounted to Rs. 21 lakhs, of which nearly the whole amount was spent during the year. Grants-in-aid from Provincial funds amounted to about Rs. 51½ lakhs, of which nearly Rs. 33 lakhs were paid to institutions under private management.

University and Collegiate education. *Part II, paras. 392 to 394.*

75. A new regulation providing for candidates passing the Intermediate Examination in parts and certain alterations in the regulations relating chiefly to the Law courses and B.A. (Honours) courses were sanctioned during the year. Affiliation was granted in Group III of the Intermediate courses to the Government Ceded Districts College, Anantapur, which was newly opened during the year. The number of arts colleges increased by one, while the strength decreased by 633 owing to the restriction of admissions to the Intermediate classes during the year whereby under the revised rules the holder of a secondary school-leaving certificate should obtain a minimum percentage of marks in certain subjects to be admitted to the University. The number of students reading for the B.A. (Honours) course in the year was 459.

Secondary education (Boys). *Part II, para. 395.*

76. Public secondary schools for boys increased by 5 in number and nearly 5,800 in strength. The direct expenditure on secondary education increased nearly by Rs. 2½ lakhs. The recurring Imperial grant of Rs. 80,000 sanctioned for the improvement of secondary education was fully spent. A change has been made in the syllabus with a view to

encourage a more thorough and more widely spread study of the vernacular and classical languages of India.

Elementary education (Boys). *Part II, para. 396.*

77. Public elementary schools for boys further increased both in number and strength, the increase being shared by all the three grades of elementary schools. The percentage of male pupils in public elementary schools calculated on the total male population was 5·2. Seventy-six per cent of the schools were under private management, 22 per cent being under missions. 645 buildings were constructed during the year for the housing of public elementary schools. Trained teachers formed 33 per cent of the total number as in the previous year.

Special education. *Part II, paras. 397 and 398.*

78. The number of teachers under training in training schools showed an increase. Most training schools for masters have been provided with hostel accommodation. An educational exhibition was organized at Saidapet and a series of lectures was held in connexion with it. Special lectures on first-aid were also given in training schools. Including the schools under the control of the Director of Industries, there were 5,258 pupils receiving instruction in technical or industrial subjects.

Female education. *Part II, para. 399.*

79. There was a further increase both in number and strength of non-European schools for girls ; the number of girls under instruction at the end of the year was 321,540, representing a percentage of 1·5 to the total female population. There was a further advance in the numbers of Brahman and Muhammadan girls receiving secondary education. There were 184 women reading in arts colleges on the 31st March last. The Government Queen Mary's College for Women, Madras, was raised to the first grade and it was affiliated in Group V of the B.A. Pass course.

European education. *Part II, para. 400.*

80. The number of schools intended for Europeans increased by 3 and the strength by 90. In the case of girls, the results of European school examinations continued to be poor. There were 65 students reading in arts colleges, but there is no separate college for Europeans. Recurring grants provided from Imperial funds for the education of the domiciled community were fully utilized.

Reformatory School, Chingleput. (1916.) *Part II, para. 407.*

81. The average strength of the school rose from 250 to 254 ; of the 48 admissions during the year, 23 belonged to the criminal classes. The general health of the pupils improved considerably. Eighty-two per cent of the pupils discharged during the year obtained employment and 65 per cent of them were following the trade taught them in the school. The results of the inspection of the general educational classes were satisfactory. At the Government technical examinations, 90 per cent of the pupils examined were successful.

Government Examinations. *Part II, para. 408.*

82. At the Technical examinations there was an increase in the numbers of candidates for all three grades, but there was a fall in the percentage of passes in the case of the Advanced and Intermediate grades. At the Special Test examinations, there was a slight decrease in the number of examinees, but there was an increase in the percentage of passes ; the results were better than those of the previous year in most tests. The receipts more than covered the expenditure.

Lawrence Memorial School. (1916.) *Part II, para. 409.*

83. Both the branches of the school maintained their strength. The results obtained at the High School examinations by both of them were very creditable, while those of the girls' branch at the Middle School examination were not so satisfactory. The health of the school was good.

84. There was a slight increase in the total strength and the average daily attendance. The results of the Government technical examinations were very fair, the percentage of passed to examined being 69. Nearly 45 per cent of the pupils belonged to the artisan caste. Special effort was made during the year to develop the jewellery class, the art being very useful in helping the pupils in making a good living after training. **School of Arts.** *Part II, para. 410.*

85. The daily average number of readers in the Connemara Public Library was 62 against 56 in the previous year. The number of standard works added to the Library considerably decreased as a large consignment was lost at sea. The peripatetic search party was working on the Sanskrit and vernacular manuscripts in the Tanjore Palace Library and consequently the number of manuscripts acquired for the Oriental Manuscripts Library decreased. **Libraries.** *Part II, para. 412.*

86. The number of periodicals slightly increased in 1916 but there was a general fall in the circulation of newspapers, a notable exception, however, being *New India* which enlarged its circulation. The same journal was also conspicuous as the leader in a campaign of vituperation against Government, which resulted in the forfeiture of the security demanded under the Press Act. The general tone of the newspapers of the Presidency was much freer and more violent politically, but their attitude towards the war was as a rule irreproachable. **Periodicals. (1916.)** *Part II, para. 413.*

87. The fall in the number of books and periodicals registered during the previous year was made up in the year under report, vernacular publications and books dealing with religion being, as usual, the largest in number. Increasing political activity has resulted in a rise in the number of publications relating to politics from 11 to 58. **Registration of books. (1916.)** *Part II, para. 414.*

88. Considerable additions were as usual made to the different sections, chief among them being a stone figure of Krishna from Vijayanagara, a copper image of Natesa from Bēlūr in the Salem district with a pedestal dated 1510 A.D., and eleven aurei of the Roman Emperors Claudius I, Nero and Domitian, discovered in the compound of the Madura Mills at Madura. The demonstrations to teachers and pupils in Madras schools were continued. A catalogue of the large collection of timber specimens in the Economic Gallery was published. The Marine Aquarium attracted as usual a large number of visitors. **Government Museum and Marine Aquarium.** *Part II, paras. 415 to 419.*

89. The publication of weather reports and rainfall returns was carried on as in previous years. The number of rain-recording stations decreased by one. Ninety-eight per cent of the stations were inspected by district officers. **Meteorology.** *Part II, para. 420.*

90. At the Madras Observatory observations are mainly confined to those necessary for maintaining an accurate time service and this work was efficiently performed throughout the year. The Kodaikānal Observatory is devoted mainly to solar work but complete meteorological, magnetical, and seismetric records are also maintained, while other astronomical observations are made when matters of special interest are involved. **Astronomy. (1916.)** *Part II, para. 421.*

VIII.—ARCHÆOLOGY.

Archæology. *Part II, para. 422.*

91. A sum of Rs. 23,794 was spent on conservation works. The old fort and temples at Udayagiri in the Nellore district and the Buddhist remains at Guntupalle in the Kistna district were surveyed and photographed. The Province of Coorg was visited and a list of works worthy of conservation was prepared.

Epigraphy. *Part II, para. 423.*

92. During the year 24 copper-plate records and 668 stone inscriptions were examined and transcribed. The Ambāsamudram and Guntūr taluks were surveyed village by village for inscriptions. Copper-plate grants discovered during the year include some valuable information about the early members of the Eastern Chālukyan dynasty. Part V of *South Indian Inscriptions*, Volume II, was issued.

IX.—MISCELLANEOUS.

Ecclesiastical. *Part II, paras. 425 and 426.*

93. The Bishop of Madras was absent on leave for six months from the 29th April 1916. The services of five chaplains were placed at the disposal of the Government of India in the Army Department for active service in Mesopotamia. Owing to the shortage of chaplains on the establishment the Government of India sanctioned the appointment of two missionaries as temporary chaplains. At the close of the year there were in all 258 clerks in Holy Orders officiating under the licences of the Bishop of Madras and the Bishop in Tinnevelly and Madura.

Stationery. *Part II, para. 427.*

94. The value of stock on hand was Rs. 8·08 lakhs against Rs. 9·28 lakhs in 1915–16, the decrease being due to a fall in receipts during 1915–16. The value of stores issued was Rs. 7·4 lakhs against Rs. 9·4 lakhs. The decrease is chiefly due to the curtailment in the issue of paper and other articles of stationery. The value of the closing balance for the year was Rs. 7·2 lakhs against Rs. 8·1 lakhs in 1915–16, the fall being explained by the decrease under receipts.

Government Press, Madras. *Part II, paras. 428 to 431.*

95. There was a fall both in the receipts and in the expenditure of the Government Press, due in the former case to less chargeable work and smaller sales of Acts and books and in the latter mainly to reductions in printing orders. Work equal to 274,919 standard pages with 118,578,300 impressions was turned out.

District presses. *Part II, para 432.*

96. There was a decrease in the value of the work done by district presses during the triennium. The cash receipts, however, showed an increase, which was chiefly due to the insertion of a larger number of private advertisements in District Gazettes. There was a slight decrease under charges.

Chemical Examiner's Department. (1916.) *Part II, paras. 433 to 435.*

97. The total number of cases investigated by the Chemical Examiner in 1916 was 2,152 against 1,099 in the previous year. Of the cases investigated, 1,582 were general analyses and other work for various Government departments, municipalities and private parties. The increase in the general analyses was chiefly due to articles examined for the Customs Department. Poison was detected in 46·7 per cent of the cases of suspected human poisoning and in 59 per cent of the cases of suspected animal poisoning.

98. Excluding dispensaries, there were during the year under report 3,076 charitable institutions in the Presidency, with an income of Rupees 14·05 lakhs, 92 garces of paddy and 26 muras of rice. Of these institutions, 2,017 were maintained entirely by means of subscriptions and donations from the general public and endowments in land and money, the total receipts from these sources amounting to Rs. 7·33 lakhs. Of the remaining institutions some were supported by Government, some partly by Government and partly by the public and the remainder by local bodies. 1,940 institutions were intended to provide travellers with accommodation and in many cases with food and other supplies. For the relief of paupers, 391 institutions were maintained. There were 662 institutions exclusively devoted to giving help to Brahmans and Byragis. The total number of persons aided during the year at all the charitable institutions was 11,418,427.

Charitable institutions. *Part II, paras. 436 to 438.*

99. As in previous years, by far the greater number of Muhammadans who entered the superior service of Government joined the police force; 535 Muhammadans entered the police force and 40 joined the superior service in other departments. The total number of Muhammadans in superior service was 8,355, or 210 less than last year's figure. The percentage of Muhammadans in the total number employed was 14·13 as against 14·14 in 1915-16.

Muhammadans in the service of Government. *Part II, para. 439.*

PART II.

DEPARTMENTAL CHAPTERS, ETC.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

PHYSICAL.

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES.

1. *Vide* pages 1 to 10 of the Report on the Administration of the Madras Presidency during the year 1911–12.

POLITICAL.

HISTORICAL SUMMARY.

2. *Vide* pages 11 to 33 of the Report on the Administration of the Madras Presidency during the year 1911–12.

FORM OF ADMINISTRATION.

3. *Vide* pages 34 to 54 of the Report on the Administration of the Madras Presidency during the year 1911–12.

CHARACTER OF LAND TENURES.

4. *Vide* pages 55 to 60 of the Report on the Administration of the Madras Presidency during the year 1911–12.

SYSTEM OF SURVEY.

5. *Vide* pages 61 to 72 of the Report on the Administration of the Madras Presidency during the year 1911–12.

SYSTEM OF SETTLEMENTS.

6. *Vide* pages 73 to 86 of the Report on the Administration of the Madras Presidency during the year 1911–12.

CIVIL DIVISIONS OF THE BRITISH TERRITORY.

7. *Vide* pages 87 to 100 of the Report on the Administration of the Madras Presidency during the year 1911–12.

DETAILS OF THE CENSUS OF 1911—TRIBES AND LANGUAGES.

8. *Vide* pages 101 to 104 of the Report on the Administration of the Madras Presidency during the year 1911–12.

CHANGES IN THE ADMINISTRATION. (1916–17.)

Personnel.

9. His Excellency the Right Hon'ble Lord Pentland, P.C., G.C.I.E., continued as Governor throughout the year 1916–17. The Hon'ble Sir Harold Stuart, K.C.S.I., K.C.V.O., I.C.S., resigned his office as an Ordinary Member of Council from the 12th October 1916 and the Hon'ble Mr. H. F. W. Gillman, I.C.S., was appointed as permanent Member of Council to fill the vacancy. The term of office of the Hon'ble Sir Pazhamarneri Sundaram Ayyar Sivaswami Ayyar, K.C.S.I., C.I.E., expired with effect from the 26th February 1917 and M.R.Ry. the Hon'ble Diwan Bahadur P. Rajagopala Achariyar Avargal, C.I.E., was appointed a permanent Member of Council to fill the vacancy.

RELATIONS WITH TRIBUTARY STATES AND FRONTIER AFFAIRS.

TRAVANCORE STATE.

(M.E. 1091—17TH AUGUST 1915 TO 15TH AUGUST 1916.)

[*Report on the Administration of Travancore State for the year 1091 M.E.*]

[The Maharaja of Travancore is a Kshatriya. His age is 60. He has a male heir. The area of the State is 7,129 square miles and the population according to the census of 1911 is 3,428,975. The annual subsidy paid to the British Government is Rs. 8,10,652. The gross revenue is estimated at Rs. 1,52,79,386.]

Political.

10. In April 1916, His Excellency the Governor of Madras visited the planting districts in North Travancore. On the 19th April His Highness the Maharaja left for Coonoor and stayed there for a month.

General.

11. The ordinary expenditure of the year was Rs. 1,45,75,660, resulting in a surplus of Rs. 7,03,726. Setting off this surplus against the capital expenditure on the extension of the railway from Quilon to Trivandrum, there was a net deficit of Rs. 3,44,780, thus reducing the Darbar balance from Rs. 49,02,047 at the beginning of the year to Rs. 45,57,267 at its close. The adverse effect of the war was not, on the whole, felt to the same extent as in 1090. The revenue from Stamps and the receipts under Registration increased. The revenue from Customs, however, still suffered, owing to increase of freights and difficulty of securing adequate tonnage. Excise revenue was seriously affected by the disturbance of economic conditions caused by the war and declined by more than a lakh during the year. Forest revenue also suffered to some extent, owing to the dullness of the timber market, both in and outside the State. The other sources of revenue have been consistently growing, in spite of war conditions. The amount payable by the Darbar to the South Indian Railway Company to make up the guaranteed interest to the debenture holders of the Quilon-Shencottah section of the Tinnevelly-Quilon Railway has fallen, owing to the development of traffic on this section.

Administration.

12. The current demand was Rs. 36·54 lakhs, showing an increase of Rs. ·7 lakh on the demand. There was a perceptible fall under non-seasonal remissions, while the seasonal remissions showed a slight increase and the Land Revenue collections on account of the current demand amounted to nearly 97 per cent in 1091 against 99 per cent in the previous year.

Compared with 1090 the volume of coercive action taken during 1091 shows an increase under all the heads owing to the tightness of the money market.

13. Four ordinary meetings of the Legislative Council were held during 1091. Three Regulations were passed by the Council during the year. Besides these, three Regulations were passed direct by His Highness the Maharaja ; the most important of these is a Regulation to make better provision for the protection and efficient working of the British Electric Telegraph in Travancore. **Protection and Legislation.**

14. At the end of the year the actual strength stood at 1,850. There was an increase of 12 in the number of policemen prosecuted, as compared with 1090. The percentage of conviction was 8 against 4 in the previous year. The number prosecuted by private parties was 77, and of these prosecutions only three ended in conviction. The total number of cognizable cases for disposal was 3,631, out of which 976 were referred as false, 411 transferred to the undetected list and 1,985 were charged. Police.

15. Nine hundred and seventy prisoners were admitted into prison. Of this number 842 had been convicted, 42 were under trial and 86 were civil prisoners. Jails.

16. Seventy-three courts exercised criminal jurisdiction, i.e., one less than in the previous year. The number of offences reported rose from 19,353 to 21,850, of which 14,412 were offences under the Penal Code and 7,438 under special and local laws against 14,082 and 5,271 respectively in 1090. The number of juvenile accused rose from 204 to 274. The number of public servants prosecuted and the number convicted rose from 179 and 8 to 225 and 11, respectively. Two hundred and sixteen prosecutions were started by private individuals and of these three ended in conviction. Eighty per cent of the total number convicted by the magistracy were sentenced to fines only against 74 per cent in the previous year. Twelve magistrates exercised appellate jurisdiction and there were 1,598 appeals for disposal, of which 1,553 were disposed of. 177 cases were committed to the Sessions Courts and of the 431 persons involved 51 per cent were convicted. The appeals fell from 522 to 492. The High Court dealt with 5 referred cases, 210 appeals and 642 revision cases. Criminal Justice.

17. In the 44 civil courts there was, including original suits and appeals, an increase of 9,622 cases. In the munsifs' courts the institutions of the year rose from 60,563 to 70,308, there being an increase under both ordinary suits and small causes. The arrears increased from 18,732 to 21,285. The number of suits of between one and two years' duration fell from 4,525 to 4,473, while those of more than two years' duration rose from 987 to 1,000. The average duration of contested cases disposed of fell from 9 months and 24 days to 9 months and 23 days. In the district courts the number of ordinary suits instituted during the year went down from 737 to 594 ; the disposals fell from 730 to 703 and exceeded the institutions by 70. The average duration of contested suits disposed of fell from 16 months and 25 days to 15 months. Original litigation was very heavy during 1091 and the increase is noticeable in all grades except in suits of the highest value. In the High Court the institutions of the year numbered 573 first appeals and 526 second appeals, against 544 and 529 respectively in 1090. The disposals were 41 per cent of the cases against 44 in the year preceding. Civil Justice.

18. The total number of documents presented for registration and the aggregate value of the transactions rose. The increase was due to the improved economic conditions of the State. The ratio of the expenditure to the gross income was 39 per cent against 41 per cent in 1090. Registration.

19. The season was on the whole not very favourable to agriculture. The prices of food-grains and the wages of labour were higher than in 1090. The experimental silk farm at Trivandrum continued to be worked on the same lines as in previous years, and a sericultural school was started at Nanthancode under the management of the Salvation Army. Successful attempts were made during the year towards the development **Production and Distribution.**

of sugarcane and groundnut in one taluk. It is gratifying to note that widespread interest is being evinced by the ryots in agricultural improvements generally.

Factories. 20. At the end of the year there were 94 factories against 86 in the previous year ; of these 44 were for tea-making. Two of the four factories in the Devicolam division are worked by electric power. The total number of operatives at work was 6,143 including 978 women and 1,321 children.

Trade. 21. The value of the exports was British Rs. 4,32,14,127 and that of the imports Rs. 2,95,64,627. Nine per cent of the external trade was by sea, 53 per cent by backwater and 38 per cent by land. There was a large increase in the export of copra, coir, coffee, hides and rubber, but there was a decrease in tea and pepper. The trade in the produce of the coconut tree, the duty on which alone formed 69·3 per cent of the collections from dutiable exports, showed an increase of British Rs. 19,31,406 as compared with the previous year. The total value of the rice and paddy imported during the year was British Rs. 1,43,66,519. As usual the bulk of the trade was with British India.

Public Works Department. 22. The total expenditure on Public Works amounted to Rs. 27,22,845. The net outlay on the Kodayar project works during the year was Rs. 34,476, the total outlay on the project up to the end of 1091 being Rs. 80,01,511. 45,541 acres were under irrigation. Rs. 4·43 lakhs were spent on the maintenance of main roads ; the average cost of maintenance was Rs. 176 per mile. On new roads and canals Rs. 5·1 lakhs were spent.

Railways. 23. The railway from Shencottah to Quilon continued to work at a loss. The construction of the Quilon-Trivandrum extension is in progress. The amount spent by the Darbar on account of the extension in 1091 was Rs. 10,48,506 against Rs. 13,45,020 in 1090, the total expenditure till the end of 1091 being Rs. 29,54,993.

Anchal. 24. There were 214 offices and 295 letter boxes and the total length of the mail line at the end of the year was 1,266 miles against 1,284 in 1090. The receipts were Rs. 1·92 lakhs and the cost of the department was Rs. 1·72 lakhs. The Savings Bank system was introduced in five more Anchal offices ; 34 offices were doing Savings Bank work against 29 in the previous year. 2,431 new accounts were opened.

Vital statistics and Medical services. 25. The number of births registered during the year was 70,404 and the number of deaths 46,707 against 72,380 and 46,754, respectively, in 1090. The birth and death rates were 20·5 and 13·6 per mille, respectively, against 21·1 and 13·6 in the preceding year.

Diseases. 26. There was a further decrease in mortality from cholera. 13,027 infants were vaccinated during the year against 12,648 in 1090, the percentage to registered births being 18·5 against 17·4 in the previous year. Mortality from small-pox decreased from 223 to 130.

Medical service. 27. Twenty-seven hospitals and 26 dispensaries gave medical relief to 869,563 persons. There was an increase in the number of out-patients treated. The 49 midwives attended 3,751 cases, giving an average of 77 cases for each midwife in the year.

Education. 28. The chief events of the year are the introduction of vernacular teaching in non-language subjects in the lower forms of secondary schools, the extension of higher elementary education, the improvement of the system of training elementary teachers and the institution of scholarships for technical studies in foreign countries. Special attention continued to be paid to the progress of Muhammadan education. Taking the number of children of school-going age to be roughly 15 per cent of the total population, 62 per cent of the population of school-going age were attending recognized schools in 1091 against 51·1 per cent in 1090. The number of colleges affiliated to the University of Madras was five and their strength rose from 750 to 862. The number of recognized secondary schools remained the same as in 1090, viz., 79, and their strength rose from 18,840 to 20,646 ; many new elementary and girls' schools were opened.

COCHIN STATE.

(M.E. 1091—17TH AUGUST 1915 TO 15TH AUGUST 1916.)

[*Report on the Administration of the Cochin State for the year 1091 M.E.*]

[The Raja is a Kshatriya. He is 58 years of age and has male heirs. He pays a tribute of Rs. 2,00,089 and maintains a military force of 290 men. According to the census of 1911 the population of the State was 918,110. The gross revenue of the State was Rs. 48·17 lakhs. The Resident for Travancore is also the Resident for Cochin.]

General and Political.

29. The chief event of the year was the visit of His Highness the Raja to Madras on the invitation of His Excellency the Governor of Madras to join the Committee formed to supervise the management of the Madras People's Park Fair and Exhibition held for the benefit of the War Fund in December 1915. The hot weather of 1091 was spent by His Highness at Coonoor. Mr. R. A. Graham, I.C.S., continued to be the British Resident throughout the year. Mr. J. W. Bhore, I.C.S., held the office of Diwan.

Finance.

30. The actual transactions of the year resulted in a surplus of Rs. 3·46 lakhs, the gross revenue and expenditure being Rs. 48·17 lakhs and Rs. 44·71 lakhs respectively. The receipts for 1091 showed an increase of Rs. 1·97 lakhs over those of the previous year. The increase is chiefly noticeable under the heads Salt, Stamps, Abkāri and Ganja, Registration, Interest, Education, Public Works and Railway. There were on the other hand decreases under a few heads, notably under Land Revenue, Customs, Tobacco and Forests. The State had at the end of the year a net asset of Rs. 17 lakhs after completely providing for all liabilities, against Rs. 13·62 lakhs at the beginning of the year.

Legislation.

31. Five Regulations were passed during the year, one of the most important being the Regulation to amend the Cochin Hindu Religious Institutions Regulation. At the close of the year there were ten legislative measures under consideration of the Darbar.

Village Panchayats.

32. Seven more village panchayats were constituted bringing the total number up to 17. The panchayats in most cases gave a good account of themselves.

Anchal.

33. The value payable system was introduced in the Anchal offices of the State, but the system has not yet been made reciprocal with Travancore.

Production and Distribution.

34. During the year there was a partial recovery in trade and business activities due to a partial adaptation of trade to war conditions. The total area under cultivation during the year was 500,053 acres, 207,271 acres being under wet or paddy. The total current demand for the year under Land Revenue proper was Rs. 10,71,933 as against Rs. 10,71,359 in 1090. The demand under capital fell considerably owing to the fact that there were no accretions or other valuable lands for sale as in previous years. The total Land Revenue collected under all heads amounted to Rs. 11,45,792 or 99·9 per cent of the demand.

Land Revenue.

Diseases of crops.

35. The chief diseases of crops were the mahali of arecanut palms and the coconut leaf disease. Spraying was done on a large scale against both diseases with good results.

Co-operative Societies.

36. Fifteen societies were registered during the year as against 8 in the previous year, and at the end of the year there were 23 societies in working order. Almost all the loans issued were for productive and useful purposes ; they amounted to Rs. 24,418.

Forests.

37. The forests continued to be worked under the system of selection felling by extraction of timber of specified girths, the trees being marked by the department. No new working-plans were drawn up during the year. The rubber trees were satisfactory and yielded well. The net revenue of the department for the year amounted to Rs. 3,44,048, against which had to be set off a sum of Rs. 1,21,520 on account of the maintenance charges of the forest tramway for the year, which was debitable to

the Forest Department. The actual net revenue therefore was Rs. 2,22,528 as against Rs. 2,15,963 in 1090.

Tramway. 38. There was no extension of the tramway during the year. The cost of maintenance was Rs. 1·14 lakhs as against Rs. 1·15 lakhs in the previous year and the receipts under private traffic during the year amounted to Rs. 24,687 as against Rs. 23,435 in the previous year.

Railway. 39. The State Railway was worked by the South Indian Railway Company. The gross earnings amounted to Rs. 6·94 lakhs and the net earnings gave a return of 2·91 per cent on the capital outlay.

Protection.

Police. 40. The permanent establishment of the force consisted of 91 officers and 495 men, the ratio of effective police to population and area being 1 to 1,651 persons and 1 to 2·54 square miles respectively. All the men in the force can read and write. The River Police staff sanctioned in 1089 continued as a temporary institution in the year under report. The number of cases under the Penal Code and local and special laws was 1,206 as against 1,075 in 1090, and the percentage of convictions to charged cases rose from 87·9 in 1090 to 89·1 in 1091. There was a further increase in the number of grave crimes reported during the year (630 against 523 in 1090). The amount of lost property recovered was 53·10 per cent as against 67·77 per cent in 1090. The average cost of a policeman was Rs. 202·07 and the net cost per head of population was 2 annas.

Criminal Justice. 41. 3,316 cases were disposed of by the Magistrates and the percentage of convictions fell from 32·9 in 1090 to 31·7 in 1091. Appeals were filed in 26·2 per cent of the cases in which an appeal lay against the decisions of Second-class Magistrates, compared with 31·7 in 1090. The original decision was confirmed in 62·98 per cent of these cases. In the Sessions Courts 40 cases were disposed of. The expenditure under criminal justice amounted to Rs. 55,823 as against Rs. 55,072 in 1090.

Jails. 42. The number of convicts, under-trials and civil prisoners admitted during the year was 414, 3 and 104 respectively. The convicts were, as usual, supplied with clothing manufactured in the Central Jail. The coir industry was resumed towards the close of the year.

Civil Justice. 43. The total number of suits instituted and appeals filed in the year was 15,855 and 964 as against 13,491 and 922 respectively in the previous year. The munsifs disposed of 15,222 cases. Of the 1,240 suits pending at the end of the year, 5 were over three years and 2 over two years old. The District Judge disposed of 713 appeals leaving 269 as arrears as against 604 and 283, respectively, in the previous year. The average duration of contested regular and second appeals disposed of by the Chief Court was 267 and 202 days respectively against 345 and 241 days respectively in 1090.

Registration. 44. The number of registry offices was 21 and 51,536 documents were registered, showing an increase of 7,196 on the previous year.

Vital Statistics and Medical Services. 45. Compulsory registration of births and deaths under Regulation II of 1081 was in force in the same towns as in the previous year. The number of births registered was 15,414 as against 16,489 in the previous year. The total number of deaths was 10,037 as against 10,486 in 1090. The percentage of births and deaths during the year to population was 1·67 and 1·09. Public health was satisfactory throughout the year. There was only one death from cholera, whereas small-pox was fatal in 48 cases.

Medical relief. 46. The opening of the King Edward Memorial Maternity Hospital raised the number of medical institutions in the State at the end of the year to 27, viz., 11 hospitals, 14 dispensaries and 2 asylums. Nearly 290,000 patients were treated. The number of patients treated by female medical subordinates decreased from 45,000 to 40,779. With the opening of the King Edward Maternity Hospital a beginning was made in training midwives. The three veterinary institutions continued to work with success. The total expenditure on account of medical relief, including the two asylums and the three veterinary institutions, was Rs. 1,44,099 as against Rs. 1,21,280 in the previous year.

47. As in the previous year there were six towns under health officers. The compulsory scavenging system continued to work in some of the towns. Lighting was done departmentally. Sanitation and Conservancy.

48. The total Government contribution to the town councils was Rs. 60,430. The scheme of supplying the town of Ernakulam with drinking water from the Periyar river as well as the construction of the foreshore wall at Ernakulam and the improvements to the Palathode and Padiathode canals were practically completed by the close of the year. 37,249 vaccinations were performed, and of these 88·32 per cent were successful as against 90·60 per cent in the previous year. Work of the Town Councils. Vaccination.

49. The expenditure under State Public Works during the year was Rs. 5,17,346 as against the budget grant of Rs. 5,36,500. Three new roads were opened during the year and 489 miles of roads were under the maintenance of the department. Public Works.

50. The net expenditure by the State on education was Rs. 3,98,257 or Rs. 20,968 more than in 1090. The total number of State schools was 133 as against 131 in 1090, but the number of aided schools rose from 162 in 1090 to 177 in 1091. The total number of pupils under instruction during the year was 74,505 as against 67,096 in the previous year. 35·2 per cent of the educational work was done by the State institutions. 75·5 per cent of the boys and 32·8 per cent of the girls of school-going age attended school as against 68·3 and 29·3 respectively in 1090. Upper secondary education was imparted in 15 schools as against 14 in the previous year. The strength of the high school departments of the nine State high schools rose from 941 to 1,016. The number of aided high schools was six. The grants-in-aid given by the State to the aided high school departments amounted to Rs. 6,930 as against Rs. 5,808 in 1090, the average cost to the State per pupil instructed being Rs. 9 as against Rs. 12 in the previous year. The number of schools in which lower secondary instruction was imparted during the year was 36 as against 32 in 1090. Primary education was given in 1,354 schools as against 1,329 in 1090. There were two complete high schools for girls. The total amount of grants disbursed during the year was Rs. 1,28,531 as against Rs. 1,08,349 in 1090. The increase was due to the employment of better qualified teachers and to the subsidizing of new schools. Besides grants-in-aid to schools a sum of Rs. 10,983 was spent during the year for stipends and scholarships. Instruction.

51. Including the Infantry and Artillery, the Nayar Brigade consisted of 25 officers and 248 men. Military.

PUDUKKŌTTAI STATE.

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917.)

[*Report on the Administration of Pudukkōttai for fasli 1326.*]

[The Raja, His Highness Sri Brihadamba Das Raja Sir Marthanda Bhairava Tondaiman Bahadur, G.C.I.E., is a Kallar by caste and is 41 years of age. The population of the State according to the census of 1911 is 411,878. The Raja pays no tribute and maintains a military force of 110 infantry and 18 cavalry. The Collector of Trichinopoly is ex-officio Political Agent for the State.]

52. On July 22, 1916, the Rani gave birth to a son. His Highness the Raja returned to India in the last week of December 1916 and left for Australia early in March 1917. The Legislative Advisory Council met twice during the year and passed two Regulations. General.

53. The revenue of the State increased under most of the principal heads, and the total rose from Rs. 18·71 lakhs in fasli 1325 to Rs. 19·06 lakhs in the current fasli. The receipts were Rs. 1,09,225 more than the budget estimate, the increase being chiefly under Land Revenue, Stamps, Revenue and Finance.

Forests and Interest. The expenditure totalled Rs. 16·93 lakhs against Rs. 18·60 lakhs in 1325. The chief decrease was under Civil Works. The opening balance of the fasli was Rs. 28·50 lakhs and it closed with a balance of Rs. 30·62 lakhs, of which a sum of Rs. 11·77 lakhs is invested in Government securities, Rs. 16·75 lakhs in fixed deposits with the Bank of Madras and Rs. 3·46 lakhs in the Indian War Loan. The expenditure on Public Works was Rs. 4·48 lakhs, Rs. 1·14 lakhs were spent on irrigation, Rs. 1·21 lakhs on the new palaces and Rs. ·81 lakh on communications. The season was unfavourable, for the rainfall, though in excess of the average, was untimely. Still, the price of food-grains showed a tendency to fall, the fall in the case of cholam and cumbu being somewhat marked.

Land Revenue.

Of the total demand under Land Revenue which was Rs. ·35 lakh less than in fasli 1325, 98·95 per cent was either collected in the fasli, written off, or adjusted. This is, in view of the unfavourable character of the season, a satisfactory result. Rs. 74,964 were realized in the fasli from the sale of house-sites and redemption price levied on agricultural lands converted into house-sites in Chetti nathams. The number of co-operative societies increased from 21 to 22, while the total membership rose from 3,268 to 4,102. The expenditure under Land Revenue was Rs. 1,13,032 or 11·57 per cent of the actual collections. Inam survey operations have been nearly completed ; there remained at the close of the fasli only nine villages to be dealt with. There was an outlay of Rs. 14,424 on the work during the fasli. During the fasli field correction work in respect of three nathams already settled and regular survey of the new natham formed in fasli 1325 were taken in hand and carried out. One Chetti natham was settled during the fasli.

Abkāri.

54. The total Abkāri revenue, inclusive of the contribution from the British Government, aggregated Rs. 2,93,458 as against Rs. 2,75,135 in fasli 1325.

Stamps.

The revenue realized from Stamps was Rs. 2,27,105 against Rs. 2,23,613 in the previous fasli.

Law and Justice.

55. In the Court of Sessions there were 10 cases for disposal. Of these 8 cases involving 17 persons were disposed of and 11 persons were convicted.

Criminal Justice.

In the Magistrates' Courts 3,859 cases were disposed of against 4,027 cases in the previous fasli. The percentage of conviction fell from 40·52 to 38·58. The average duration of cases was 14·40 days and 52 cases were pending over three months. The total number of appeals on the original side of the Chief Court was 12, in six of which the conviction was reversed. Fourteen appeals were disposed of on the appellate side, the original decision being confirmed in 11 cases. There were 46 revision petitions. The Chief Magistrate heard 72 appeals.

Civil Justice.

56. The total number of suits on the original side for disposal was 10,631 against 9,973 in the preceding fasli. 9,603 suits were disposed of leaving a balance of 1,028 cases pending against 1,230 cases in the preceding fasli. The number of regular suits for disposal was 2,872, of which 2,307 were disposed of. The percentage of disposal was as 78·49 against 80·22 in the previous fasli. The average duration of contested suits fell from 207 days in the previous fasli to 164. Of the suits concluded 189 lasted over one year and 170 over six months. The percentage of disposal of small cause suits was 92 and the average duration was 81 days as against 82 days in the previous fasli. Similarly the Registrar disposed of his suits more quickly, but there was a slight deterioration in the Court of the rural Small Cause Judges. There was a further increase in the average duration of regular appeals—282 days against 245.

Prisons.

57. 281 prisoners consisting of 94 convicts, 91 under-trials, 94 civil prisoners and 3 lunatics were admitted into the Central Jail and 265 were discharged. The accommodation for the prisoners was ample and their health was good. There were no escapes during the fasli and one convict who had escaped during the previous fasli was recaptured. A sum of Rs. 413 was realized by the sale of garden produce and there was a net income of Rs. 2,445 from the jail industries on an outlay of Rs. 7,873. The

expenditure on the Central Jail amounted to Rs. 7,636 or Rs. 126 per head of the average daily population as against Rs. 118 per head in the previous fasli.

Police.

58. The Police force consisting of a Deputy Superintendent, 3 Inspectors, 11 Sub-Inspectors, 27 head constables and 195 constables was under the control of the District Superintendent of Police, Trichinopoly. Although the strength has been reduced there is still a shortage of 36 men. The number of cases of all kinds rose from 2,136 to 2,142 and the percentage of detection was 83 against 87 in the previous fasli. Grave crimes increased from 285 to 312. One case of murder, 8 cases of dacoity, 16 cases of robbery and 102 cases of house-breaking were reported. The murder case was undetected. Of the dacoity cases one was undetectable, three were false and of the remaining four, one was discharged and three were pending trial. None of the robbery cases ended in a conviction. Of the 102 house-breaking cases, 10 were detected. The general conduct of the force judging by the number of punishments was unsatisfactory.

Education.

59. The educational institutions under the direct management of the State consisted of a second-grade college, 2 lower secondary schools, 3 special and 181 primary schools. One incomplete secondary school and 152 primary schools received grants-in-aid from the State and there were 67 unaided schools. The secondary schools showed a slight increase in strength together with a slight fall in average attendance. The number of State primary schools increased by 11 and that of aided schools by 13, but the number of unaided schools fell from 91 to 67. The total number of boys under instruction increased from 13,546 to 14,029, or 47·58 per cent of the male population of school-going age. There were 19 girls' schools, 8 of them being reserved for Muhammadans. The total number of girls in all the schools was 1,751. During the fasli 26 school-houses were repaired and 7 were newly constructed. An improvement was made in the pay of teachers under training. The expenditure exclusive of the college was Rs. 76,502 against Rs. 68,574 in the previous fasli. The number of pupils at the college was 663. In the intermediate examination 9 candidates out of 22 passed, while in the school-leaving examination 34 out of the 73 pupils were declared eligible for the college course.

Vital statistics and Medical services.

60. There were no deaths from cholera and victims of small-pox numbered 300, whereas in fasli 1325 the deaths from cholera and small-pox were 568 and 619 respectively. The total number of births and deaths registered during the year was 7,551 and 7,022 respectively and the rates per mille were 18·33 for births and 17·05 for deaths. Effective steps are being taken to ensure accurate registration. The medical institutions consisted of a hospital, a women and children's dispensary and 9 rural dispensaries. There was a general increase in the number of patients and a corresponding rise in the expenditure (Rs. 53,400 against Rs. 36,606). The total number of cases vaccinated was 11,642 against 11,187 in the previous fasli, but the percentage of successful cases declined from 92·41 to 92·24.

Local Bodies.

61. The municipal council held 30 meetings in the fasli but 7 had to be adjourned for want of a quorum. The Jewell filters worked satisfactorily and the pipe water was reported to be maintaining its purity. The cost of pumping filtered water was Rs. 2,928. A new tank was dug and 13 others were reserved for drinking purposes only. Steps are being taken to have the drainage question investigated and a scheme prepared. The total receipts of the municipality including the State grant of Rs. 14,000 amounted to Rs. 55,475 and the expenditure was Rs. 51,426. The income from taxation was Rs. 15,168 or As. 8–8 per head of the population. The expenditure of the five unions fell considerably below that of the previous year, but some attention was devoted to the improvement of sanitation in non-union villages, in several of which a small scavenging staff was maintained out of State funds.

BANGANAPALLE STATE.

[*Administration Report of the Banganapalle State for the official year 1916–17.*]

[Nawab Saiyid Ghulam 'Ali Khan Bahadur, a Muhammadan of the Shiah sect, is the ruler of the State. He is 43 years old and has male heirs. He pays no tribute and maintains no military force. The population of the State is 39,356 (1911 census). The Collector of Kurnool is Political Agent.]

General. 62. The most important event of the year was the devastation of the town of Banganapalle by the floods of the river Zurreru on 31st October. From 15th to 31st October, 19·49 inches of rain fell, the rainfall of the 30th October being 9·50 inches. On the morning of the 31st the Jolapuram tank, 7 miles from Banganapalle, breached and emptied its waters into the already swollen river. The floods in the town only lasted for 25 minutes, but nearly 1,000 houses were washed away. Only 17 lives were lost, the smallness of the number being largely due to the timely and energetic action of the police. The homeless people were sheltered and fed in the Nawab's palace. The damage caused by the flood is roughly estimated at nearly seven lakhs of rupees. A relief fund amounting to Rs. 12,000 was raised, and Government on the recommendation of the Political Agent sanctioned the grant free of seigniorage to the amount of Rs. 2,946–14–0 of timber from the reserved forest in the Kurnool district for the relief of the poor whose houses were destroyed. Owing to this disaster, practically all public works were suspended during the latter part of the year with a view to economy.

Financial. 63. The total income for the year was Rs. 2,68,859 or Rs. 13,519 less than the revenues of the previous year. The chief decreases were under Land Revenue and Forests, and are ascribed to the abnormal rains. The total expenditure was Rs. 2,48,489 which is Rs. 25,567 less than the expenditure of 1915–16. The Nawab continued his monthly contribution of Rs. 350 to the Madras Hospital Ship fund.

Education. 64. The highest education imparted in the State is up to the lower secondary standard. There were 27 State schools including two girls' schools. The total average attendance in the State schools was 918, which is nearly a hundred less than last year. In addition to these, the State aided 7 mission elementary schools for Panchamas, with a total average attendance of 46. There were also four State-aided private schools, including one for Muhammadan girls. These schools had an attendance of 64, more than half of whom were girls.

Public Security and Crime. 65. The work of the Police Department was most satisfactory. There was a marked fall in the amount of crime and an encouraging increase in the percentage of stolen property recovered. The strength of the force was slightly increased.

Public Health and Sanitation. 66. The hospital did useful work, though it was badly damaged in the floods. The average daily mumber of out-patients increased from 102 to 116, while that of in-patients declined from 10 to 8. Vaccination was for a time completely stopped by the floods, all the records being lost and a large number of the people homeless. There were no epidemics, but the death-rate increased from 17·28 to 31·94.

Forests and Industries. 67. The floods did great damage to the forests, and steps are being taken to restock the blanks. The weaving factory also suffered severely, all the new looms being washed away and damage to the amount of Rs. 1,650 was caused. Sales of goods manufactured in the factory amounted to Rs. 2,659, but there was a total loss of Rs. 1,782 on the year's working. The sericultural industry has for the time being been ruined by the floods, which swept away the whole of the building, equipment and mulberry plantation.

SANDUR STATE.

[*Administration Report of the Sandur State for the official year 1916–17.*]

[The Raja of Sandur, Raja Srimant Venkatrao Rao Sahib, Hindu Rao Ghorpade Mamlukatmadar, Senapati, is a Mahratta. He is 25 years of age. He pays no tribute and maintains no military force. The population of the State is 13,517 (1911 census). The Collector of Bellary is ex-officio Political Agent, exercises a general supervision over the administration and is also Sessions Judge for Sessions cases and appeals.]

General and Political.

68. M.R.Ry. A. Subbaraya Mudaliyar Avargal continued to hold the office of Diwan.

Revenue and Finance.

69. No income was derived from the mines during the year owing to their closure on account of the war. The revenue rose in 1916–17 from Rs. 71,315 to Rs. 73,620, whereas the expenditure fell from Rs. 63,898 to Rs. 63,166.

Protection. Police. Courts.

70. The scale of pay of police constables was revised so as to make the service more attractive. There was no grave crime, and a marked decrease in petty crime. Detection work was good. The Diwan as first-class Magistrate of Sandur, disposed of 144 out of 145 cases filed, and as District Munsif disposed of 33 suits out of 36. There were no criminal appeals. Three civil appeals filed in the Raja's Court are pending. The cost of the maintenance of the jail was Rs. 95, while Rs. 58 was earned by the prisoners' labour.

Production and Distribution.

71. The season was good, except that the heavy rains at the end of October damaged the crops. The total rainfall was 40·19 inches against an average of 31·11 inches for the previous five years. Crops were fair and good wages caused a rise in the price of food-grains to be little felt. The total receipts from forests were Rs. 18,445 against Rs. 14,228 in the previous year while the cost of the establishment (including the game preservation staff) rose from Rs. 1,368 to Rs. 1,496. With a view to encourage trade, the octroi import duty was abolished and replaced by an increase in toll fees with satisfactory results. The agricultural banks paid a dividend of 10 per cent.

Public Health and Vital Statistics.

72. 11,634 patients were treated at the State dispensary as against 11,366 in the previous year. The midwife attended to 151 cases. The cost of maintaining the dispensary was slightly less than in 1915-16. Public health was good. There was a small outbreak of plague which was checked by prompt evacuation, the number of deaths being 12. The birth-rate was 27 and the death-rate 20 per mille, as compared with 29 and 18 respectively in the previous year. Three hundred and thirty-three cases were vaccinated as against 337 in 1915–16, and the percentage of success was 84·08. Rupees 1,081 were spent on the improvement of congested areas.

Education.

73. There are eleven elementary schools in the State, of which eight are maintained entirely from the State funds. The attendance at the elementary schools on 31st March 1917 was 418 against 351 in the previous year. The expenditure on education rose from Rs. 2,195 to Rs. 2,227.

CONDITION OF THE PEOPLE.

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917.)

[*Season and Crop Report for fasli 1326 (1916–17).*]

74. The heavy rainfall during the monsoon in the Kistna district brought down floods in some of the rivers and necessitated the grant of remissions on a large scale in four taluks. Nevertheless the season was, on the whole, favourable to agricultural operations except in Cuddapah for dry crops and in Tinnevelly for wet crops. The area under first crop cultivation was 34,320,000 acres against a normal extent of 33,767,000 acres and the total cropped area was 39,052,000 acres against a normal

area of 38,166,000 acres. Paddy, groundnut and indigo were very largely grown, but the extents under cholam and cotton were much below the normal. Paddy increased chiefly in Anantapur and Kistna. The decline in cholam cultivation was mainly in the Deccan and was due to the preference given to other crops such as groundnut and indigo for which very high prices prevailed at the times of sowing. The decrease in the extent under cotton is directly attributed to the influence of the war and the consequent transport difficulties. The harvest prices of the principal food-grains were generally at or above the level of those prevailing in the previous year except those of rice in nine districts, of ragi in six districts, of cholam in Nellore and Trichinopoly and of cumbu in Vizagapatam. In no district did the harvest prices of the principal food-grains reach the scarcity rates except in the case of cholam in Madura. During the year under report the increasing scarcity of freight made itself felt and caused a drop in the prices of exported produce in some cases and restricted the rise that might otherwise have taken place in other cases. In July 1915, freight for groundnut cost about 85*s.* per ton. In October 1916, this had risen to 220*s.* and by May 1917 to 320*s.* But even at this price very little freight is available. The growing stringency of the money market and the difficulty of obtaining money from other countries also affected prices adversely. Lastly, the increasing restrictions on rail goods traffic have seriously hampered the movement of produce. The first crop to feel the effects of the freight shortage was groundnut. The crop was a bumper one and as soon as it began to come into the market in October 1916 the price fell from Rs. 40 per candy to Rs. 26–27 by December at which figure it has remained ever since. Export of cotton from Madras Port has practically ceased since January 1917, but fair quantities have gone from Tuticorin, mainly to Japan. The difficulty of obtaining long-stapled American cotton for warp in Bombay and other cotton spinning centres has led to an increased demand for Madras long staples. The steadily increasing price of cotton in Manchester has kept up Indian prices and there has been a steady rise during 1916–17. The value of indigo exported reached Rs. 609 per cwt. in January 1917, but thereafter fell considerably owing partly to the freight difficulty and partly to the size of last year's crop. Much remains unexported. Large profits were made by growers and exporters of senna in Tinnevelly up to August 1916 when the price reached Rs. 40 per cwt. at Tuticorin. There was a sudden fall from that date, the price being Rs. 19 in March 1917. This fall appears to have been due to the breaking of a "corner" in the London market. The difficulties of financing trade with Ceylon and the restrictions on goods traffic have checked rice milling and lowered the price of exported paddy in the deltas. Curiously enough the local price of rice has not fallen appreciably, though prices do show a downward tendency. The large landholders who usually sell their crop for export appear to be holding their stocks in hope of better prices. On the West Coast copra fell in price, but still remains a profitable crop. The price of pepper has ruled very high this year. The condition of the agricultural population continues to be satisfactory. The effects of the cyclone in South Arcot were severe at the time, but plentiful work was forthcoming in clearing roads, repairing irrigation channels, buildings, etc. The shortage of fodder which occurred in the black soil tracts of Tinnevelly caused many ryots there to sell some of their stock of draught cattle, but the high prices obtained for cotton enabled most of the black soil ryots to maintain their stock by importing paddy straw. The damage to the cholam and paddy crops in Kurnool led to a local rise in the price of food-stuffs, but here again the high prices of cotton and indigo enabled ryots to face this without trouble. The fall in groundnut affected ryots who depended mainly on this crop, but the yield was a bumper one and the price finally reached was not unremunerative.

POLITICAL PENSIONS. (1916.)

75. The political pensions in force on the 1st January 1916 amounted to Rs. 3,03,298–1–0 per annum and were distributed among 491 pensioners. During the year pensions amounting to Rs. 3,710 were either newly sanctioned or were transferred from other provinces, and pensions amounting to Rs. 7,645–5–0 either lapsed or were transferred to other provinces. Eighteen pensioners died during the year, and the pension of one was resumed. Nine new pensioners were added to the list and the pensions of three persons were commuted. The pensions in force on the 1st January 1917 amounted to Rs. 2,99,362–12–0 and were distributed among 478 pensioners. The payments made to the Carnatic stipendiaries and the Tanjore family aggregated Rs. 2,01,291–8–10 and Rs. 40,576–8–6 respectively.

CHAPTER II.

ADMINISTRATION OF THE LAND.

REALIZATION OF LAND REVENUE.

(FASLI 1325—1ST JULY 1915 TO 30TH JUNE 1916.)

[*Report on the Settlement of Land Revenue for fasli 1325.*]

Sources of Land Revenue.

76. The land revenue of the Presidency is derived from the undermentioned sources :—(*a*) Peshkash or revenue from permanently-settled estates ; (*b*) Shrotriyam jodi or quit-rent levied on inam villages ; (*c*) Assessment including water-rate on lands held under the ryotwari system ; (*d*) Miscellaneous revenue ; and (*e*) Proprietary estates' village service.

Peshkash and shrotriyam jodi.

77. The total amount of peshkash during the fasli was Rs. 49,86,531 against Rs. 49,87,350 in the preceding year. The decrease of Rs. 819 is chiefly due to a reduction on account of lands taken up for public purposes. The quit-rent payable to Government on villages held on shrotriyam on favourable tenure was Rs. 7,56,294 or Rs. 29 less than in the previous fasli.

Ryotwari and Miscellaneous.

78. The total extent of ryotwari holdings during the year was 25·68 million acres and exceeded that of the previous year by 129,447 acres. The increase was contributed by all the districts except the Nilgiris and it was noticeable in Anantapur and South Kanara. The total assessment on holdings was Rs. 518·17 lakhs against Rs. 515·35 lakhs in the previous year showing an increase of Rs. 2,82,169. The increase was marked in the districts of Guntūr, North Arcot, Madura and South Kanara, these districts together contributing an increase of Rs. 1,93,829 or about 70 per cent of the total increase. The increase in Guntūr was due to the revenue derived from lands newly assigned on patta and to the additional revenue derived from lands transferred from dry to wet ; that in North Arcot to the introduction of resettlement rates in two taluks ; that in Madura to the favourable character of the season ; and that in South Kanara to the extensive assignment of waste lands on darkhast. The total area cropped in ryotwari holdings during the year was 20·540 million acres against 20·597 million acres in the previous year showing a decrease of about 57,000 acres. This figure is the net result of a decrease of 112,000 acres dry and an increase of 55,000 acres under wet. Dry waste charged showed an increase of 230,000 acres, and wet waste charged increased by 5,000 acres ; wet waste remitted fell by 48,000 acres. The total area cropped amounted to 21·81 million acres against 21·93 million acres in the previous year. The revenue from water-rate and second crop charge amounted to Rs. 34·78 lakhs against Rs. 32·72 lakhs or Rs. 2·06 lakhs more than in the preceding year. There were large increases in Gōdāvari, Kistna, Nellore, Cuddapah, Anantapur, Kurnool, Chittoor and Madura generally due to the favourable character of the season. The considerable decreases in Chingleput and South Arcot were due to the insufficient and uneven distribution of rainfall. The net increase, Rs. 2·06 lakhs, was the result of a decrease of Rs. 6,552 under "water-rate on dry lands" and of an increase of Rs. 2,13,113 under "second crop charge."

Remissions.

79. As compared with the previous year there was a net decrease in remissions of Rs. 5,51,124. Season remissions showed a net decrease of Rs. 5·69 lakhs. The remission under the head of "waste remitted" amounted to Rs. 1·76 lakhs or Rs. 2·22 lakhs less than that

remitted in the preceding year. The decrease was marked in the districts of Cuddapah, Anantapur, Bellary and Chittoor. There was however a large increase of Rs. 32,286 in South Arcot due to the failure of the monsoons. The total amount remitted under the head of "shavi or short crop" was Rs. 85,279 against Rs. 1,59,293 in the previous year showing a net decrease of Rs. 74,014; the decrease was marked in the districts of Cuddapah (Rs. 33,579) and Kurnool (Rs. 19,902), while in South Arcot (Rs. 31,332) there was a noticeable increase. Of the total remissions under "shavi" Rs. 83,951 related to "wet lands" and Rs. 1,328 to dry lands. A remission of Rs. 4,567 was granted under "short crop." Tirvakammi remission (the remission of the difference between wet and dry assessment on wet land cultivated with dry crops owing to the insufficiency or failure of the water-supply) amounted to Rs. 1,87,469 against Rs. 4,50,642. The amount remitted under the head of "injury by floods" was Rs. 69,190 against Rs. 63,262 in the previous year, Kistna alone showing an increase of Rs. 6,280. Fixed remissions amounted to Rs. 1·30 lakhs against Rs. 1·32 lakhs in the previous year. The decrease occurred mainly under increment remissions in the districts of South Kanara and Malabar. Remission of assessment on lands newly assigned on patta on which no crop was raised during the fasli also showed the large decrease of Rs. 4,417. Remission for the maintenance of irrigation works, however, showed an increase of Rs. 7,958. Beriz deductions amounted to Rs. 9·10 lakhs against Rs. 8·91 lakhs in the previous year, showing a net increase of Rs. 19,150.

Miscellaneous revenue.

80. The revenue under this head amounted to Rs. 94·61 lakhs against Rs. 92·15 lakhs in the previous year showing a net increase of Rs. 2·47 lakhs. Gōdāvari showed the largest increase (Rs. 1,65,884) and South Arcot the largest decrease (Rs. 28,978). The increase in Gōdāvari was due mainly to an increase in the revenue from the occupation of poramboke land and charges for Government water used for zamindari and inam lands. Water-rate on minor inams in ryotwari villages amounted to Rs. 15·16 lakhs against Rs. 13·71 lakhs in the previous year. The revenue under the head "charge for water in zamindari and inam villages including tirvajasti and fasaljasti" amounted to Rs. 0·84 lakh more than in fasli 1324. "Charges levied for occupation of assessed and unassessed lands for which no pattas have been granted" amounted to Rs. 0·43 lakh less than in the previous year. The revenue under "poramboke occupation" amounted to Rs. 0·61 lakh more than in the previous year, but the total area occupied fell by 4,333 acres. "Sale-proceeds of lands sold" amounted to Rs. 0·47 lakh less than in the previous year. The net ryotwari demand excluding remissions but including water-rate, second crop charge and miscellaneous revenue amounted to Rs. 631·91 lakhs against Rs. 619·05 lakhs in the previous year.

Cesses.

81. The current demand under cesses was Rs. 71·61 lakhs against Rs. 68·92 lakhs in fasli 1324. The increase is ascribed chiefly to the revision of land-cess due on estates, to the increase of cesses along with the increase of revenue and to the levy of railway cess in Gōdāvari, Trichinopoly and Cuddapah.

Collections.

82. The balance outstanding at the end of the fasli including both arrears and current was Rs. 8,98,461. The balance on 1st July 1916 was Rs. 8,99,734. Up to the end of October 1916 Rs. 7,60,532 or 84·5 per cent had been collected, Rs. 3,400 written off the accounts, and Rs. 264 were considered to be irrecoverable. The net recoverable balance on 1st November 1916 was Rs. 1,35,538. The charges of district administration, including salaries, etc., of Revenue Inspectors, but excluding those of village establishments, were 6·8 per cent of the land revenue and cesses realized, as was the case in the preceding fasli. Including village service charges the total charges were about 14 per cent of the collections of land revenue and cesses.

Coercive processes.

83. 1,293,401 processes were issued during the year for the realization of Government revenue, against 1,530,159 in fasli 1324. There was a decrease

under every head except that of sales which showed a slight increase. The number of demand notices decreased in nineteen districts and increased in six districts. The increase is marked in the districts of Guntūr, Tinnevelly and Malabar. The number of distraints and attachments was 79,446 in the year under report against 109,712 in fasli 1324. There was a decrease in the percentage borne by the number of distraints and attachments to that of demand notices as compared with the previous fasli. The number of defaulters whose immovable property was attached in the year was 14,871 against 18,339 in fasli 1324. In the Madura district a large disproportion is noticeable as in previous years, between the number of defaulters whose personal property was distrained and the number of those whose real property was attached ; it is due to the larger number of absentee pattadars in the area irrigated by the Periyar. The decline in the proportion of defaulters who paid the arrears before sale notices were issued, was again noticeable and the percentage of actual sales to sale notices was 4·22 against 2·92, representing 0·05 of the total number of pattas as in the preceding year. Immovable property of the estimated value of Rs. 1,20,235 was sold for the recovery of arrears amounting to Rs. 24,336 and realized Rs. 53,350. The total area of lands bought in by Government for want of bidders was 3,025 acres of dry and 361 acres of wet, against 2,136 acres of dry and 290 acres of wet in fasli 1324. More than one-half of the total area bought in was in Cuddapah, Anantapur, Bellary and Madura.

Transfer of registration.

84. 242,743 applications for transfer of registration were received through the Registration Department during the fasli against 85,409 in the previous fasli, an increase of 184·21 per cent. The number of applications presented direct to revenue officers was 70,372 as against 49,315 in fasli 1324, an increase of 42·69 per cent. The number of cases which revenue officers dealt with on their own initiative rose from 19,794 in fasli 1324 to 27,414 in fasli 1325. The total number of applications of all kinds to be dealt with in the fasli under report including the number pending disposal at its beginning was 379,474 ; of these 297,977 were disposed of during the fasli, leaving a balance of 81,497 pending at the close of the fasli.

Loans and Advances.

85. The advances made under the Land Improvement Loans Act during fasli 1325 amounted to Rs. 2·40 lakhs and those under the Agriculturists' Loans Act to Rs. 5·11 lakhs. The aggregate amount advanced under both the Acts was thus Rs. 7·51 lakhs as against Rs. 8·18 lakhs in the previous year. The decrease in most of the districts is ascribed to the favourable character of the season. Of the sums repayable during the year under the Land Improvement and Agriculturists' Loans Acts respectively on account of principal, 90 per cent under the former Act and 87 per cent under the latter Act were collected. Advances amounting to Rs. 19,157 under the former Act and Rs. 18,628 under the latter Act were repaid by borrowers on account of loans, the repayment of which had not fallen due, while sums amounting to Rs. 2,573 under the former Act and Rs. 402 under the latter Act were written off the accounts as irrecoverable. The aggregate amount of principal and interest repayable during the year under both the Acts was Rs. 11,34,708, of which a sum of Rs. 2,69,278 or 24 per cent was collected without resort to coercion and a sum of Rs. 6,89,373 or 61 per cent after the issue of demand ; Rs. 39,294 were realized after attachment but before sale, Rs. 1,859 by the sale of movable property and Rs. 13,466 by the sale of immovable property. The balance outstanding at the end of the year was Rs. 1,21,438. With the aid of loans under the Land Improvement Loans Act 433 wells were constructed during the fasli, against 435 wells during the previous year, and 326 wells were repaired against 349 in the preceding year. Rs. 34,595 were spent on the reclamation of 1,200 acres and Rs. 34,900 were expended on the purchase and installation of oil-engines and pumps. Under the Agriculturists' Loans Act, 7,871 head of cattle were purchased while 36 houses were rebuilt. Seed grain was purchased for Rs. 1,965, while Rs. 1,150 were expended on sugar mills.

SURVEYS. (1916-17.)

[*G.O. No. 3513, Revenue, dated 7th November 1917.*]

86. All the six parties and the two town survey detachments which were at work in the previous year continued their operations during the year under report. No. I Party was employed in the Northern Circars, No. II in the Nellore district, Nos. III and IV in Madura, No. V in South Arcot and No. VI in Tanjore. The town survey section, north, was at work in Ganjām and Vizagapatam, and the town survey section, south, in Tinnevelly, Coimbatore and Tanjore districts. The headquarters of the town survey section, south, were transferred from Trichinopoly to Tanjore during the year. In addition to the above, survey of streets was completed in 18 unions and was in progress in five others. The gross expenditure was Rs. 11,90,707, of which Rs. 7,72,284 is chargeable to Government and Rs. 4,18,423 to proprietary estates, municipalities, etc. **Parties.**

87. No. I Party worked in Ganjām, Vizagapatam, Gōdāvari, Kistna and Guntūr. In Ganjām the outturn comprised the cadastral survey of 13 square miles of Government land and 53·5 square miles of proprietary estates. The survey of Pondakhol Mutta was commenced in November 1916 and completed in March 1917. Five square miles of Kallikōta-Atagada estate were surveyed during the year. Chikati estate was taken up in August 1916 and 47 square miles were finished before the close of the year. In Vizagapatam the block survey of three whole inam villages was taken up at the instance of the Special Settlement Officer and completed. The cadastral survey of the Gollaprolu estate in Gōdāvari was taken up and completed. In Kistna the cadastral survey of the Mirzapuram zamindari, with the portion of Medur recently added thereto, was finished, the total area surveyed during the year being 98 square miles. An aggregate area of 5 square miles in the estates of Ravipadu, Kouitivada, Peddamamidipalli and Kalagampudi was also credited during the year. The survey of Narikampadu in the Tiruvur division was abandoned as the District Board withdrew its application. The resurvey of Tenali taluk, Guntūr district, was commenced in July 1916, and 161 square miles credited during the year. The town survey section completed the survey of the Anakāpalle municipality and also did work in Vizagapatam, Chicacole and Parlākimedi. The total area surveyed was thus 15·66 square miles. The cadastral survey of estate lands of the Anakāpalle municipality was also completed. In Nellore and Guntūr No. II Party surveyed under the Punganūr system an aggregate of 440 square miles in four taluks of Venkatagiri zamindari. The cadastral survey of the unsurveyed portion of the Nellore municipality and the block survey of the villages of Matakampudi and Ramachandragunta were finished. In Chittoor the survey of the Padmapuram shrotriyam was taken up and completed. The survey of local fund roads in Karvetnagar was undertaken and 56 linear miles were finished out of a total of 166 linear miles. In Madura the outturn of No. III Party comprised 407 square miles of resurveys and 30·6 square miles of cadastral survey of proprietary estates. Street surveys were completed in four unions to the extent of 52 linear miles. In Madura No. IV Party resurveyed 244 square miles in the Mēlūr taluk out of a programme of 300 square miles. The large deficit was due to the exceptional conditions in the taluk and its unpopularity with the surveyors who deserted or resigned in large numbers. There was a strike of surveyors on a small scale in the beginning of December 1916. Street surveys were finished in two unions to the extent of 16 linear miles. In Trichinopoly the cadastral survey of Komagudi inam was completed. In Ramnad street surveys were completed in four unions totalling 46 linear miles. The town survey section completed the survey of Tiruvālūr, Tinnevelly and Palamcottah municipalities, and did some work in Māyavaram, Coimbatore and Tuticorin. Besides the above town surveys the section completed the resurvey of 1·99 square miles in Tiruvālūr and 8 linear miles of road surveys in Tinnevelly. The operations of No. V Party were confined to the South Arcot district where **Districts.**

it completed the remaining 1 square mile of revision survey in the Cuddalore taluk and the resurvey of 123 square miles in Villupuram and 331 square miles in Tindivanam. The joint verification by a British and a French representative of the boundaries of 16 villages in the Cuddalore taluk abutting the French territory was completed. Street surveys were completed in four unions totalling 70 linear miles. In Tanjore 348 square miles were resurveyed by No. VI Party. The survey of the Palace estate lands in the Mannārgudi taluk was taken up and completed, the area credited being 2 square miles. Street surveys were completed in three unions comprising 37 linear miles. In Trichinopoly the Agrahara Valavandi estate was commenced and 4·5 square miles credited during the year. The demarcation and survey of both the banks of the Cauvery river in the Kulittalai and Musiri taluks was completed during the year. In Salem the survey of the Kannankurichi mitta consisting of eight villages was taken up and finished, the area being 11 square miles.

Central Office.

88. The area of village maps printed during the year was 4,295 square miles including 21 square miles of proprietary estates and 12 square miles of Coorg Province as against 3,220 square miles printed last year. The arrears of printing at the end of the year were 1,382 square miles against 3,633 square miles last year.

SETTLEMENTS. (1916-17.)

[*G.O. No. 3513, Revenue, dated 7th November 1917.*]

Parties.

89. All the five settlement parties which were at work at the end of the previous year continued their operations during the year under report—Party No. I in the North Arcot district, Party No. II in the districts of South Arcot, Tanjore, Trichinopoly, Coimbatore and Salem, Party No. III in the Chittoor district, Party No. IV in the districts of Madura and Ramnad and Party No. V in the districts of Ganjām, Vizagapatam, Gōdāvari, Kistna and Nellore. The operations of Party No. II were extended to the Tiruvannāmalai taluk of the North Arcot district and those of Party No. III to Bellary.

Districts.

Ganjām.

90. The diglott registers and memoirs for the remaining two villages of the Chokapād khandam and 57 villages of the previously unsettled tracts of Goomsur were submitted. The revision of quit-rents on village service inams in the proprietary estates of the taluks of Berhampur and Chatrapur and the localization and classification of paik's inams in the Pālūr estate were completed. The tabulation of the results of the block classification of the twelve whole inam villages of the Karakavalasa estate in the Chicacole taluk was completed and the proposals for the assessment of these villages for purposes of land-cess have since been approved. The revision of quit-rents in the newly-settled villages of the

Vizagapatam.

Goomsur taluk was also completed. The block survey and classification of the whole inam villages in the district was completed and the existing land-cess revised on the basis of the new classification. A special staff was organized for the revision of adangals and the survey of subdivisions and the work is now in progress in the Palkonda taluk. Progress was also made during the year in the collection of materials for the scheme report for the resettlement of the three ryotwari taluks in the district.

Gōdāvari.

Bellary.

Rough pattas were issued in three resumed inam villages in the Peddāpur taluk and the fair accounts were sent to the Tahsildar. During the year the special staff attended to patta transfer enquiries and the location of new subdivisions in respect of 20 ryotwari villages and two shrotriyam villages.

North Arcot.

91. Resettlement rates were introduced in all the 87 villages in the taluks of South Cheyyār and Wandiwash commanded by the Cheyyār

anicut system. The manuscript diglott registers of 893 villages were sent to the Board for printing. The street survey of the three unions of Visharam, Ambūr and Wandiwash was completed. In Chittoor the diglott registers of 195 ryotwari and 175 shrotriyam villages in the taluks of Chittoor, Chendragiri and Palmanēr were submitted. The reports on the introduction of the new rates of assessment in the Palmanēr taluk and in the resumed inam village of Tirumanipalle in the Punganūr zamindari were submitted to Government. The revision of quit-rents on enfranchised village service inams was carried out in the Palmanēr taluk and in the Kālahasti and Karvetnagar estates. Chittoor.

92. The diglott registers of three villages in the Erode taluk, of one village in the Coimbatore taluk and of two villages in the Karūr taluk of the Trichinopoly district were submitted. The resettlement rough accounts of six villages in the Coimbatore taluk and of three others in the Karūr taluk were handed over to the Collectors concerned. The issue of rough pattas for 69 villages in the Trichinopoly taluk during the year brought the work to a close in that taluk. The fair accounts of 119 villages in the same taluk were handed over to the Revenue Department. In the Nāmakkal taluk the revision of adangals was brought to a close. The records of 22 villages were finally passed. The balance of work connected with the localization of mamul wet areas in the Trichinopoly district was completed during the year as also the final scrutiny of the survey records of three unions in the Nāmakkal taluk. Coimbatore. Trichinopoly.

93. In South Arcot the revision of adangals was completed in 231 villages of the Gingee taluk and in 165 villages of the Tirukkōyilūr taluk. The scheme report for the resettlement of the South Arcot district was submitted. The final scrutiny of survey records was completed in respect of 217 villages in the Cuddalore taluk and of 53 villages in the Villupuram taluk and the field work preliminary to the introduction of resettlement was completed in 199 villages of the Cuddalore taluk. The initial work in connexion with the revision of adangals was completed in 58 villages of the Tanjore taluk and in 8 villages of the Pāpanāsam taluk. The Special Revenue Inspectors completed their enquiry and inspection in 127 villages of the Nannilam taluk and the Special Deputy Tahsildars completed their check in 119 villages. Complete lists showing the revised registry consequent on the revision of adangals were published in 125 villages of the Māyavaram taluk and the final check of resurvey of records was finished in 46 villages. The revision of adangals on the basis of the town survey records in the villages within the municipalities of Tanjore, Māyavaram, Mannārgudi, Negapatam and Kumbakōnam was completed during the year. The special staff completed field work in two villages and in portions of nine others included in the Madura municipality and prepared the land registers. The preparation of land registers for 66 villages in the Mēlūr taluk and 155 villages in the Tirumangalam taluk was also finished. In addition, special staff operations were started in 12 villages of the Aruppukkōttai and Paramagudi taluks of the Ramnad district. Settlement rates were introduced in the resumed inam villages of the Ramnad and Sivaganga zamindaris. The fair accounts of 66 villages of the Palni taluk were completed. Field inspection by the classifiers was completed in 46 villages of the Periyakulam taluk and 117 villages of the Dindigul taluk and final inspection by officers in 38 villages of the former taluk and in 59 of the latter. The officers also inspected the 143 Periyār-affected villages of the Nilakkōttai, Madura and Mēlūr taluks. Resettlement rates were introduced in the 27 non-Periyār villages of the Periyakulam taluk. In the Dindigul taluk rough pattas were prepared for 16 villages. The final scrutiny of survey records was completed in 69 villages of the Nilakkōttai taluk. The diglott registers for all the 68 villages of the Palni taluk were written up and those for 67 compared and finally checked. South Arcot. Tanjore. Madura and Ramnad.

Registers.

94. During the year 1,445 manuscript registers were received, 1,394 were scrutinized, 1,471 were printed and 1,171 were issued to Collectors.

Finance.

95. The total expenditure was Rs. 5·52 lakhs against Rs. 6·03 lakhs in the previous year. The cost of printing and binding was Rs. ·60 lakh while Rs. 1·46 lakhs was spent on the controlling office. The rest of the expenditure was on the settlement parties which cost Rs. ·22 lakh less than in the previous year.

LAND RECORDS. (1916–17.)

General.

96. The Land Records staffs in most of the districts were mainly employed in regular maintenance. In South Arcot, where resurvey operations are in progress and in the delta taluks of Guntūr, the Land Records Inspectors were absorbed in the special staff. During the year, Government issued orders that the system of making ferro-prussiate prints of the field measurement books should be abolished and that manuscript maps should be supplied in future for purposes of maintenance. Orders were also issued dispensing with the maintenance of bend stones except on the boundaries of porambokes. The Director reports that on the whole the maintenance of land records in the districts is satisfactory and is improving. The raising of the land records fees from four to eight annas has stimulated the ryots to attend to the repairs of their own survey marks almost universally. There is still reason to be dissatisfied with the accuracy of the reported figures, which, compiled in the first instance from karnams' stone registers, subjected in many cases to little effective overcheck, cannot be regarded as trustworthy. Taluk records are being better kept and improvement has been effected in the disposal of patta transfer cases. The rapid increase of work under the latter head makes it apparent that the existing establishments, especially of Firka Revenue Inspectors, will prove inadequate.

Operations preliminary to maintenance.

97. Operations preliminary to maintenance were in progress in parts of Ganjām, North Arcot, Madura and Coimbatore. In Ganjām the work is nearly finished in the Goomsur taluk, and has been completed in the other taluks. In North Arcot most of Polur taluk has been brought under maintenance, while in Madura preliminary work has been completed in Palni and is in progress elsewhere. The Land Records Tahsildar in Coimbatore was on special duty for a portion of the year in connexion with the straightening of "corrugated" field boundaries.

Current maintenance.

98. As far as can be judged from the statistics, which appear to be of doubtful reliability, the work done by the Land Records staff in the renewal and repair of survey marks was satisfactory in the districts of Vizagapatam, Nellore, Kurnool, Salem, Chingleput, Tanjore, Ramnad, Tinnevelly, Coimbatore and South Kanara. The work done by ryots was good in North Arcot, Chingleput and Coimbatore and fair in Guntūr, Kurnool, Bellary, Chittoor, Tanjore, Trichinopoly and South Kanara. There was an increase in the number of subdivisions sanctioned during the year, as compared with last year, but the progress made in the check-measurement and mapping of subdivisions was generally satisfactory.

Training of staff.

99. Schools for the training of karnams and revenue subordinates have as usual been held in the various districts as required. Two schools for the training of Assistant and Deputy Collectors were held during the year. The training of these officers is now definitely directed to instruction in land records work, including the examination of registers and taluk records, and the method of accounting for and recovering the cost of stones used for maintenance. Technical training in survey is also given with a view to practical usefulness.

WASTE LANDS.

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917.)

[*Season and Crop Report for the agricultural year 1916-17.*]

100. The total area of the Presidency is 89,533,299 acres, of which 34·30 million acres were under cultivation, 12·98 millions were classed as forest, and 22·31 million acres were not available for cultivation. Of the remainder, 8·47 million acres were fallow during the year and 11·45 million acres were cultivable waste not taken up by anyone. As compared with the previous year there was a slight decrease in the areas reserved for forest and other purposes and an increase in the extent of fallow land.

GOVERNMENT ESTATES.

101. There is nothing to record under this head in the Madras Presidency.

WARDS' ESTATES.

(FASLI 1325—1ST JULY 1915 TO 30TH JUNE 1916.)

[*Report on the Administration of the Estates under the Court of Wards in the Madras Presidency for fasli 1325 (1915-16).*]

Estates under management.

102. Eighteen estates continued under the Court's management throughout the fasli; the Zamorin's estate in the Malabar district was taken under the Court's superintendence with effect from the 17th September 1915. The number of estates under the Court at the close of the fasli was therefore nineteen.

Finance.

Demand, collection and balance.

103. The total current demand was Rs. 23·60 lakhs, of which Rs. 19·67 lakhs were collected and Rs. ·01 lakh written off, leaving a balance of Rs. 3·92 lakhs at the end of the year. There was no outstanding balance in Kadambūr; in six estates, the balance was less than 5 per cent of the demand; in two between 5 and 10 per cent; and in eight between 10 and 25 per cent. The balance exceeded 25 per cent in the remaining two estates, viz., Madukkūr (76·1) and Urkkādu (31·2). The large percentage in Madukkūr, which was even higher than that of the preceding year (62·2), is attributed by the Collector to the difficulty in collection work owing to the poverty of the ryots, the dullness of the groundnut market and the long-standing disputes between the ryots and the late Zamindar regarding rents. The outstanding balance in Urkkādu, though heavier than in the previous year, was mostly covered by processes. The total arrear demand at the beginning of the fasli amounted to Rs. 11·39 lakhs, of which Rs. 7·84 lakhs were outstanding at its close. There was no outstanding balance in Timmājiamma's estate, Māmbārai and Kadambūr; in one estate, the balance was less than Rs. 1,000; in three between Rs. 1,000 and Rs. 5,000; and in four between Rs. 5,000 and Rs. 15,000. The arrears exceeded Rs. 15,000 in the remaining eight estates. The aggregate cash balance of all the estates at the beginning of the fasli was Rs. 6·13 lakhs. The total cash receipts of the estates during the year amounted to Rs. 29·17 lakhs. The total assets of the fasli in cash were therefore Rs. 35·30 lakhs. The total expenditure during the year amounted to Rs. 27·99 lakhs leaving a cash balance of Rs. 7·31 lakhs at its close. Including Government promissory notes and other securities and the estimated value of grain on hand the total closing balance to the credit of the estates was Rs. 31·30 lakhs.

Surplus balances.

104. Of the estates under management those which had surplus balances exceeding a lakh of rupees at the end of the year were:— Kallikōta-Atagada (Rs. 4·91 lakhs); South Vallūru (Rs. 6·42 lakhs); Mīrzāpuram (Rs. 12·56 lakhs); Kangundi (Rs. 1·33 lakhs); and Sāptūr (Rs. 1·08 lakhs). A considerable portion of the surplus balance in Kallikōta-Atagada is required for the survey of the estate and settlement of rents. In South Vallūru three villages have since the close of the fasli been purchased on behalf of the estate at a cost of Rs. 3,48,695. The Court has also sanctioned the payment of a contribution of Rs. 15,000 from the estate

funds towards the cost of opening a dispensary at Vallūru, and arrangements are being made to establish a veterinary dispensary at the same place. The remaining amount is reserved for improving irrigation works. In Mīrzāpuram, negotiations for the purchase of three villages were not concluded when the minor attained his majority. A portion of the surplus was spent on the survey of the estate proper and of that portion of the Mēdūru estate which was added to it. Of the surplus in Kangundi it is proposed to spend half a lakh in effecting improvements to the irrigation works, on the construction of a hospital and a veterinary dispensary, on the building of a school-house and on other improvements. It is also proposed to purchase a village at a cost of Rs. 17,700. In Sāptūr the surplus is reserved for the repair of irrigation works and estate buildings, for the construction of wells and for the marriage of the ward's sisters.

Agricultural improvements.

105. In Kallikōta-Atagada the question of starting a home farm and a cattle-breeding farm is under consideration. In Uttumalai the Court has sanctioned the opening of a model pasture ground with two cattle sheds and three tube wells. In none of the estates under management were any home-farm lands used during the year for experiments in improved methods of agriculture, the bulk of such lands having been leased out as usual.

Establishment charges.

106. For all the estates, the average percentage of the establishment charges and Government commission to the normal receipts, exclusive of extraordinary items of income, such as debts recovered, sale-proceeds of property, etc., was 15·5 per cent against 15·1 in the preceding year. The percentage exceeded 15 in twelve estates. In none of the estates was it possible to curtail the establishment charges without impairing the efficiency of the administration.

Works.

107. Including the Devastānam and Chattram sections of estates the total allotment for maramat works in all the estates was Rs. 5·92 lakhs, of which Rs. 4·61 lakhs, or 77·8 per cent, were actually spent during the year against 89·2 per cent in the preceding year. The aggregate value of work done but not paid for within the fasli was Rs. 87,000. The total value of the work executed during the year was therefore Rs. 5·48 lakhs, or 92·5 per cent of the allotment against 93·2 per cent in the previous year. Of the total expenditure Rs. 2·39 lakhs were spent on irrigation works, Rs. 1·28 lakhs on buildings, Rs. ·26 lakh on roads and other works and Rs. ·68 lakh on establishments and contingencies. The aggregate outlay on maramat works was 19·4 per cent of the total ordinary charges of the year against 26·9 in the preceding year and 16·2 in fasli 1323.

Debts due to the Estates.

108. The debts due to the several estates under management at the beginning of the fasli amounted to Rs. 2·48 lakhs. The aggregate amount due was Rs. 3·15 lakhs, of which Rs. ·61 lakh was collected and Rs. ·33 lakh written off, leaving a balance of Rs. 2·21 lakhs appertaining to twelve estates. The outstanding debts were large in Kallikōta-Atagada (Rs. ·40 lakh), South Vallūru (Rs. ·44 lakh), and Mīrzāpuram (Rs. 1·15 lakhs). The greater portion of these balances were covered by decrees.

Debts due by the Estates.

109. The liabilities of the several estates at the beginning of the fasli amounted to Rs. 7·86 lakhs, exclusive of the two debenture loans aggregating £212,500 repayable in fixed annual instalments from the income of the Kallikōta-Atagada estate, of which £31,700 had been discharged up to the end of the year. Debts amounting to Rs. ·55 lakh were newly brought to account during the year. Including interests and costs which accrued during the year (Rs. ·19 lakh), the total liabilities amounted to Rs. 8·60 lakhs, of which Rs. 1·46 lakhs were repaid and Rs. ·09 lakh struck off, leaving a balance of Rs. 7·05 lakhs which was payable by nine estates. The debts exceeded Rs. 50,000 in Nandigāma, Chundi, Madukkūr and Kadavūr estates.

Education of the Wards.

110. The minors of eleven estates were in residence at Newington during the whole or part of the fasli. All the minors paid a good deal of attention to riding, gymnastics, cricket and tennis. Their health during the year was satisfactory on the whole. There was sustained progress in the education of the minors and with one exception their conduct was

uniformly satisfactory. The Kallikōta ward passed the Matriculation examination with distinction and is now preparing at Newington for the Intermediate examination. Seven of the minors were allowed to make contributions to the war fund from the incomes of their estates.

Encumbered Estates.

111. Kadavūr was the only estate in which the provisions of section 45 of the Madras Court of Wards Act I of 1902 continued to be in operation during the fasli. Debts amounting to Rs. ·31 lakh were paid off and debts amounting to Rs. ·02 lakh were struck off during the year leaving a balance of Rs. 2·08 lakhs at its close. It has been decided to sell the estate's kudivaram right in the pannai lands, in order to discharge the debts due by the estate. Proposals to issue licences to prospect for minerals are under consideration.

Miscellaneous.

112. The Zamorin's College, Calicut, maintained by the Zamorin's estate, has improved in tone and discipline. The Raja's High School, Sivaganga, continues to work well. The forests in Kallikōta-Atagada, Pedda Merangi, South Vallūru, Mīrzāpuram, Chundi, Kangundi, Timmāji-amma's estate, Kadavūr, Sāptūr, Berikai, and Madugula were worked during the year under the rules sanctioned by Government under sections 26 and 32 of the Madras Forest Act. The forests in Nandigāma were as usual under departmental management. The survey records of all the villages of the Nandigāma estate were returned during the year to the Deputy Director of Survey with a view to the publication of notices. The survey of Kallikōta-Atagada estate was practically finished. The survey and the preparation of a record-of-rights in the South Vallūru estate have been completed. The village accounts were maintained in all the estates, though the degree of their efficiency varied considerably. In Madukkūr and Kallikōta-Atagada it is reported that the low scale of pay given to karnams prevents the maintenance of proper accounts. The state of things in the Madukkūr estate has not improved much. The tenants are reported to be mostly poor and heavily indebted, but every endeavour is being made to settle the accounts of each ryot amicably.

REVENUE AND RENT-PAYING CLASSES.

(FASLI 1325—1ST JULY 1915 TO 30TH JUNE 1916.)

[*Report on the Settlement of Land Revenue for fasli 1325.*]

Revenue-paying classes.

113. The chief revenue-paying classes in the Presidency are the zamindars, whole inamdars, minor inamdars and ryotwari pattadars or ryots. Of these, for purposes of revenue, the first and last classes are the most important. There are 14 large zamindaris in the Presidency, the largest being Jeypore and Venkatagiri. The total area of all the zamindaris is over 19 million acres and the amount of peshkash paid by them was Rs. 49·87 lakhs which is rather more than a quarter of the estimated revenue. The richest zamindaris are Vizianagram, Venkatagiri, Ramnad and Sivaganga.

114. The total extent of ryotwari holdings was 25·68 million acres, of which 20·54 million acres were cropped in the year. The assessment on this was Rs. 518·17 lakhs and thus formed the bulk of the land revenue. The number of ryotwari villages was 22,321, which is a net increase of 38 over the previous year's figure. This increase is largely due to the inclusion in the Vizagapatam district statistics of Agency villages formerly omitted.

Rent-paying classes.

115. Sub-letting in ryotwari villages is chiefly resorted to by those engaged in professions other than agriculture and by large landholders. It is reported to be on the increase in Ganjām, in the area under the Periyār in Madura and in parts of South Kanara where lands are let out for the cultivation of pepper. Sub-letting is the general practice in Tinnevelly and in the delta taluks of Guntūr. In parts of Kistna a tendency has been noticed among landholders to decrease sub-letting, as they apprehend legislation on the lines of the Estates Land Act conferring occupancy rights on tenants.

CHAPTER III.

PROTECTION.

LEGISLATING AUTHORITY.

116. *Vide* pages 128 to 131 of the Report on the Administration of the Madras Presidency during the year 1911–12.

COURSE OF LEGISLATION. (1916–17.)

Legislative Council.

117. The term of office of all the additional members expired on the 31st May 1916 and the Council was re-constituted by fresh elections and nominations on the 1st August 1916. There was no change among the additional members between the 1st April and 31st May 1916. After the re-constitution, two official additional members resigned, one as he was proceeding on leave out of India and the other on becoming an additional member in the Legislative Council of the Governor-General. Two more official vacancies were caused on the elevation to the Executive Council of the Hon'ble Mr. H. F. W. Gillman, C.S.I., and the Hon'ble Diwan Bahadur P. Rajagopala Achariyar Avargal, C.I.E. A non-official additional member resigned his seat as he was proceeding to England. All the above vacancies were duly filled up in the course of the year. Including nine adjourned meetings there were fourteen meetings of the Council during the year, the average attendance of additional members being 38·8 (12·6 official and 26·2 non-official).

Acts and Bills.

118. The following Acts were passed during the year :—(1) The Madras Civil Courts Amendment Act, 1916, raising the pecuniary limit of the jurisdiction of a District Munsif to Rs. 3,000 ; and (2) the Madras City Civil Court and Presidency Small Cause Courts Amendment Act, 1916, enacting that small cause suits in the Presidency town between Rs. 1,000 and Rs. 2,000 in value, which are cognizable by the Madras Small Cause Court, may at the election of the plaintiff, be instituted in the City Civil Court and also enabling the High Court to transfer such suits filed in the Small Cause Court to its own file or to that of the City Civil Court according to its discretion. The Mappilla Succession Bill, intended to amend and define the law applicable to intestate succession among the Mappillas governed by the Marumakkattayam or the Aliyasantana Law of Inheritance, was withdrawn by the non-official member in charge of the Bill, and leave was granted to him for the introduction of a revised Bill in its place. A Government Bill to regulate the rate of interest and the transfers of land in the Agency tracts of the Ganjām, Vizagapatam and Gōdāvari districts was introduced at the meeting of the Council held on the 21st November 1916 and referred to a select committee for report. The object of the Bill was to check the tendency for the Khonds and other tribes in these tracts to be dispossessed of their more valuable lands by Uriyas and other money-lending classes and to limit the rate of interest on loans to members of hill tribes. The Bill was pending before the Council at the close of the year but has since been passed into law.

Government of India.

119. No draft Bills were submitted during the year by the Local Government to the Government of India for introduction in the Governor-General's Council.

POLICE. (1916.)

[*Report on the Administration of the Police of the Madras Presidency for the year 1916 ; Statistics of British India, Part VI, Administrative and Judicial—Police.*]

Changes in the Police Force.

120. Mr. P. L. Moore, C.I.E., I.C.S., held charge of the department throughout the year. The experimental scheme abolishing the post of Circle Inspector was introduced in Trichinopoly and Kurnool districts. Three additional subdivisions were formed in the former and two in the latter, the cadre of Deputy Superintendents being temporarily increased by four. The Superintendents of the two districts were relieved of the responsibility of any direct charge. Changes in district charges were slightly more numerous than in the preceding year. Seven districts had a single change and four others had two changes. In the remaining seventeen districts there was either no change at all or the change was for a short interval only. During the year two officers died, viz., Messrs. Bernays and Anderson, both of the Imperial Police Service. Mr. Bernays' premature death deprived the department of the services of an able and conscientious officer. Mr. Anderson, who went on leave out of India in 1914, joined the army during his leave in England and died of wounds in the Balkans on 13th September 1916.

Strength.

121. The sanctioned strength of the permanent force on the last day of the year was 32,934 or an increase of 16 over the figure of the previous year. The temporary additional forces consisted of (i) Plague force (1,567), (ii) Police guards at the various criminal settlements in the Presidency (128), and (iii) Temporary forces enlisted for other special purposes (184). With effect from 1st June 1916 the pay of the mufassal constabulary was revised as follows :—(1) The pay of head constables was increased from Rs. 15, 17½ and 20 to Rs. 17, 21 and 25 respectively in all districts except seven, in which the pay of third grade head constables was raised to Rs. 16. (2) The initial pay of constables was raised to Rs. 9½ in seven districts and to Rs. 10 in the remaining districts. (3) A local allowance of one rupee per mensem was sanctioned to constables serving in the towns of Negapatam, Madura and Tuticorin. (4) An advance of Rs. 6 was sanctioned to recruits on enlistment. This enhancement of pay, which was really a very small one as the grain compensation allowance was stopped, had little or no effect on recruitment. The number of vacancies in the constabulary at the end of the year was 1,127, which was only slightly less than that at the beginning of the year. There has been no appreciable improvement in the quality of the men enlisted.

Casualties and Health.

122. There was a decrease in the total number of casualties in the permanent force during the year (3,116 against 3,381). Resignations numbered 758 against 997 and desertions 548 against 587. The number of men discharged from the force was 667 against 560. The percentage of the number of admissions into hospitals was slightly larger than in the previous year while the daily sick rate remained the same (2·7 per cent). The number of deaths in the year was 362 against 378, the percentage to the actual strength being 1·1 against 1·2.

Conduct.

123. The ratio of all punishments inflicted during the year to the actual strength of the force was almost the same as in the preceding year. As regards absence without leave, there was a slight falling off in the percentage. The rise in the percentage of punishments for other offences was small. The average was exceeded in Madras City and twelve districts. There were fewer dismissals (294 against 356). An Inspector of Madura district was dismissed from service for being in league with a notoriously bad character. The number of suspensions was again less (357 against 370). The proportion of blackmarks to the actual strength of the constabulary was practically stationary. Free use was made of the system of deferred punishments. The number of judicial punishments again diminished, being 199 against 223 in the previous year. During the year, the King's Police medal was awarded to ten officers in this Presidency and two officers received titles. Rewards by promotion were

earned by 50 police officers and men against 54 in 1915. There was a satisfactory increase in the amount of money rewards earned by the police and by private individuals.

Education.

124. There were 3,416 head constables and 26,373 constables in the force on the last day of the year. Twenty-nine or 0·8 per cent of the former and 3,035 or 11·5 per cent of the latter were illiterate. There were again no illiterates in the forces of three districts, viz., Coimbatore, the Nilgiris and Trichinopoly Railway Police. The administration of the Provincial Training School, Vellore, continued to be satisfactory. The system of selection of Sub-Inspectors by district committees came into force during the year. The Principal, however, reports that the capacity of the men selected in the year was much the same as in the previous year. The working of the Central Recruits' schools was almost on the same lines as before. The buildings for the Central Recruits' School, Anantapur, were completed and the school has since been opened.

Cost.

125. The cost of the department in 1916 was Rs. 99,04,055 against Rs. 97,03,645 in 1915, the increase being principally due to the revision of pay of the constabulary.

Village Police.

126. The village police are in need of reform, for without their full co-operation the regular police force is bound to suffer in efficiency. Improvement in this direction will be expensive and must presumably wait until financial conditions improve. Meanwhile every effort is being made to secure the co-operation of the village magistrates. During the year 591 village officials were granted rewards against 483 in 1915.

Armed reserves.

127. The armed reserves at district headquarters and the special forces were on the whole kept up to the prescribed strength and maintained in an efficient condition. The orders on the subject of annual mobilization were generally attended to. At Malappuram a bicycle section consisting of one head constable and 12 constables was formed. The good work done by the men of the Kurnool reserve during the floods has been brought to the notice of Government. Swedish drill was introduced and arrangements are being made for the introduction of signalling.

Railway Police.

128. Although there was not much crime of great importance the number of thefts was appreciably higher than in the previous year and this is attributed to the large increase in traffic during the year. Complaints of shortages preferred by the railway authorities are steadily going down, but the number is still large in the Madras Railway Police district. The percentages of detection and of recovery of property were almost stationary. There were 12 collisions and 27 derailments but there was no loss of life. The number of persons run over and killed was almost the same as in the previous year.

Statistics of crime.

129. The prices of food-grains were slightly higher than in the previous year. Nevertheless grave crime decreased appreciably. There was a fall in the total number of true cases of cognizable crime under the Indian Penal Code excluding nuisances (52,776 against 54,474). As regards offences under special and local laws the number for the Presidency rose from 17,659 to 18,747. The number of nuisances again declined. The increase in thefts was no doubt due to the high prices which prevailed. There was a marked decrease in crime against property attended with violence, due in several districts to the restriction of the movements of criminal gangs by the application of the Criminal Tribes Act or to the arrest of notorious criminals and the consequent breaking up of their organizations and also to closer supervision over habitual criminals. The total number of serious offences against person and property was 20,818 against 21,787. There was a decrease of grave crime under every head except " ordinary theft ", the total for the Presidency falling by 429 cases. The number of murders was 687 or 15 less than that of the previous year. The most tragic case of the year was the murder of Mr. H. O. D. Harding, I.C.S., District and Sessions Judge, Trichinopoly, in broad daylight just as he was about to enter the court-house. The assasin was a Muhammadan.

The Court duffadar who was hard by and tried to protect Mr. Harding also received severe injuries. The murderer was arrested and removed to the sub-jail where he broke away from the guard, and snatching a sword from the guard room, injured a warder and chased the jailor. He had then to be shot and disabled by the head constable of the guard. He was eventually tried and executed. There were no serious disturbances of the public peace during the year. There was a noticeable decrease under dacoities as well as robberies. The former numbered 478 against 562 and the latter 974 against 1,079. The total for both dacoities and robberies for the year has been the lowest in the quinquennium. In Nellore there was again an increase, a large number of dacoities being organized by absconders from Kalichedu settlement, the working of which continued to present difficulties. An outstanding feature of the year's work was the arrest of the absconding members of the Lagarai gang, of whom all but one were caught. The services rendered by various officers including Mr. Sweney, Assistant Superintendent of Police, who was placed on special duty to run down the gang, were acknowledged by Government. A decrease under house-breaking was counterbalanced by a corresponding increase in the number of ordinary thefts which rose from 17,847 to 18,489. In spite of the prevailing high prices of hides, the number of cattle thefts declined from 4,161 to 3,936. There was a decrease in the number of true cases relating to coin (37 against 55).

Detection and prevention of crime.

130. There was a further, though slight, improvement in detection. Excluding false cases and those in which investigation was refused from the total number for disposal, the percentage of detection in the year under report stood at 26·3 as against 25·7 in the previous year. The ratio of convictions in Madras was higher than that of any other province except Bombay. The work of Sub-Inspectors is on the whole fairly well reported on. The general impression is that with increasing experience the Sub-Inspector handles individual cases better than formerly, though he still lacks skill in picking up information. A very pressing need of the department is for a more intelligent and better class of head constable who can be of some real use to the Sub-Inspector in the investigation of crime. As regards the Circle Inspector, the experiment which is under trial in Trichinopoly has shown that in the absence of this intermediate officer, the work of Sub-Inspectors can be controlled better than formerly by subdivisional officers. Out of a total of 50.984 cases reported to the police during the year under classes I to V, investigation was refused in 3,340 or 6·6 per cent against 4·4 per cent in 1915. It does not appear that the power to refuse investigation was abused anywhere. There was a further but slight increase in the amount of property lost during the year under report, while the percentage recovered was only 20·7 as against 22·2 in 1915. The percentage of successful prosecutions rose from 72·8 to 73·7, but the proportion of the number of persons convicted to those tried was still low. The poor results in prosecutions are mainly due to the inadequacy of the police prosecuting staff and the lack of supervision over investigations. The number of prisoners who escaped from police custody was 133 against 158 in the previous year. One hundred and eight of them were recaptured during the year, besides 24 who had escaped in previous years. The number of cases struck off as "wilfully and maliciously false" fell from 4,829 to 4,560.

Preventive work and criminal gangs.

131. There was a decrease in the number of known depredators as well as suspects registered, while the number of receivers registered was nearly the same. The total number of bad characters at large at the close of the year declined from 24,760 to 23,729. Of these 8·1 per cent were out of view. Relations with the Mysore Police, His Highness the Nizam's Police and the French Police continued to be satisfactory. The provisions of section 10 (*b*) of the Criminal Tribes Act were made applicable to three fresh tribes during the year. The number of persons registered under the Criminal Tribes Act during the year was 3,476. The number of persons convicted under the Act during the year was 1,323. The Deputy Inspector-General of Police, Railways and Criminal Investigation Department, was

entrusted with the general supervision and control of all the settlements in the Presidency. The work of the various settlements has not been uniformly successful, the chief trouble being to find suitable labour for the members. An attempt made to introduce members of the Kalichedu settlement into the tea plantations of the Anamalais proved a failure. In all there were ten settlements (including voluntary settlements) at work during the year and five of them are considered to have been fairly successful. The strength of the schools at the various settlements on the last day of the year was 984 (616 boys and 368 girls). The number of persons bound over under the Criminal Procedure Code was slightly less than in the previous year (1,719 against 1,774). The number of persons sent to jail for failure to furnish security was 1,197.

Criminal Investigation Department.

132. A watch over seditious literature continued to be kept. Besides other work, mostly of a confidential nature, the members of the staff were engaged in collecting information about the movements of criminal gangs, in examining coins in the sub-treasuries and railway cash offices throughout the Presidency and in the investigation of special cases such as note forging, false personation, theft of railway mail bag, etc. The number of references to the Finger-print Bureau was 15,398 against 16,271 in 1915 and the number of successful identifications was 3,753 or 24·4 per cent, a record figure. These include 2,999 references from other Provinces and Native States of which 394 were identified. The number of finger impression slips received for record during the year was 13,336.

Finger-print Bureau.

CRIMINAL JUSTICE. (1916.)

[*Statistics of the Criminal Courts in the Madras Presidency for the year 1916; Statistics of British India, Part VI, Administrative and Judicial—Criminal Justice.*]

Courts.

133. On the 31st December 1916, there were in the Madras Presidency the following criminal courts, viz., the High Court, 25 Sessions Courts (including three for Agency Tracts), 5 Additional Sessions Courts (including four in Agency Tracts), 25 District Magistrates' Courts, 2 Additional District Magistrates' Courts, 4 Presidency Magistrates' Courts, 103 Subdivisional Magistrates' Courts, 22 Courts of Assistant and Deputy Magistrates without divisional charges, 444 Subordinate Magistrates' Courts (including 124 Tahsildar Magistrates' Courts), 131 Benches of Magistrates (on which 899 Honorary Magistrates had seats), 85 Special Magistrates' Courts, 4 Cantonment Magistrates' Courts, and 4 Honorary Magistrates' Courts. This year two Benches were established in the town of Madras, in addition to the two already working and on the last day of the year there were 97 Honorary Magistrates as against 74 in 1915. During 1916, 19 new Bench Courts were established, of which 5 were in North Arcot and 6 in Tanjore. Besides Magistrates of the classes already mentioned 4,299 Village Magistrates exercised jurisdiction. Compared with the figure for 1915 (4,314) and the average for the preceding five years (4,392) the number shows a slight decrease. Opinions still differ as to whether litigants prefer a cheap court or the greater dignity of a more expensive court. The total number of original cases instituted in the Criminal Courts during the year was 343,352 or 4,965 more than in the previous year; the Presidency town contributed 57,566 cases, Tanjore 19,524, Trichinopoly 18,749 and North Arcot 18,338. The number of appeals preferred fell from 10,619 to 10,200.

Village Courts.

134. In the Village Magistrates' Courts the total number of cases instituted fell from 12,669 to 12,072 and the number of persons tried by those courts also fell from 21,597 to 21,091 in 1916. Of these 16·57 per cent were convicted against 17·94 per cent in 1915.

Original cases.

Regular Magistrates' Courts.

135. The number of cases instituted in the Regular Magistrates' Courts in the mufassal was 272,241 against 267,257 in 1915, of which 3,715 were pending at the end of the year against 3,716 in 1915. The average duration of a trial was 6·9 days against 6·8 in the previous year; before

Bench Courts and Special Magistrates, the average duration was 2 days, before Sub-Magistrates 9, before the Deputy Magistrates 26, before Assistant Magistrates 12, and before Joint Magistrates 29. The total number of cases instituted in the Presidency Magistrates' Courts was 57,523 against 57,010 in 1915. An increase in the cases under the City Police and Hackney Carriage Acts is attributed to the more energetic application of the provisions of these laws by the executive. A decrease of 2,000 in the cases under the City Municipal Act is ascribed to recovery of taxes in a large number of cases without recourse to law, to vigilant protection of the water-supply at the Red Hills by watchers, and to the greater opportunity given to persons who had infringed sanitary regulations of conforming to the requirements of law. The number of cases committed to the sessions in the mufassal was 1,473 against 1,417 in 1915. The courts to which the largest number of cases was committed were the courts of Coimbatore (144), South Malabar (107) and North Arcot (102). Coimbatore and South Malabar had also the largest number of cases for trial in 1915 and Coimbatore and North Arcot in 1914. There was a noticeable increase in the number of cases committed to the Sessions Courts of Coimbatore (33), Trichinopoly (30) and Tinnevelly (12). There was a fall in Tanjore (24) and South Arcot (9). The total number of cases pending in all the courts was 37 against 46 at the end of 1915. The average duration of cases before Sessions Courts rose from 40 to 41 days ; 3,369 persons were under trial and of these 1,641 or 48·71 per cent were discharged or acquitted. Forty-three cases were committed to the High Court Sessions against 34 in the previous year.

Presidency Magistrates' Courts.

Sessions Courts.

The High Court.

136. Of the persons sentenced by second and third-class magistrates, 15,050 appealed to first-class magistrates as against 16,129 in the previous year. The appeals of 744 persons were pending at the end of the year as against 849 at the end of 1915. The average period which elapsed between the presentation of an appeal and its disposal in the courts of subdivisional magistrates was 18 days against 19 days in the previous year. The percentage of successful appellants was the same as in last year, viz., 31. The number of persons who appealed to Sessions Courts against the decisions of first-class magistrates was 2,640 against 2,374 in 1915. The average duration of an appeal in the Sessions Courts fell from 31 days in 1915 to 27. The percentage of appellants who had their convictions reversed or the proceedings quashed was 19·4. The number of appellants to the High Court was 1,001 against 1,255 in 1915. The Government appealed against the acquittal of 47 persons, the average for the preceding five years being 61. Four hundred and seventy-six appellants had their appeals rejected *in limine* ; the convictions of 85 persons were set aside, and in the case of 13 the order of acquittal was altered into one of conviction on appeal by Government. The finding and sentence in the case of 235 persons were maintained after notice and on 61 the sentences were reduced or otherwise altered. New trial or further enquiry was ordered in the case of 43 persons. The average duration of an appeal was 43 days against 47 days in 1915.

Appeals.

Magistrates' Courts.

Sessions Courts.

The High Court.

137. The number of applications for revision presented in the District Magistrates' courts was 587 against 553 in 1915. The District Magistrates took up 38 cases *suo motu* or on reports from subdivisional magistrates, against 49 in the previous year. In Sessions Courts 424 applications for revision were presented or 18 less than in the previous year : and the number of cases taken up *suo motu* was 67 against 94 in 1915. Nine hundred and fifteen revision petitions were received in the High Court ; 127 cases were reported by District Magistrates and Sessions Judges and 49 were taken up by the High Court *suo motu*. Death sentences on 99 persons were referred to the High Court for confirmation under section 374 of the Code of Criminal Procedure. The sentences on 63 persons were confirmed, those on 10 persons were commuted to transportation for life, and the sentences on 26 persons were reversed and acquittal ordered. Of the cases referred by Sessions Judges under section 307, Criminal Procedure Code,

Reference and Revision.

on the ground that the verdicts were wrong, the verdicts on 32 persons were upheld and those on the remainder (13 of "guilty" and 16 of "not guilty") were reversed.

The Jury system.

138. The number of persons tried by jury was 1,318 and in the case of 1,247 persons the Judges approved of their verdict. The number of persons tried with the aid of assessors was 1,561. In the case of 1,025 persons the Judge agreed with all the assessors and in the case of 215 he differed from one or more of them and in the case of 321 he differed from all the assessors. The majority of the Judges reported that the jury system on the whole worked fairly well.

Miscellaneous.

Punishments.

139. The number of witnesses detained for over three days was still large both in Magistrates' Courts and in Sessions Courts. 242,882 sentences were passed during 1916 of which 63 were of death, 177 of transportation, 19,283 of rigorous imprisonment, 5,051 of simple imprisonment, 308 of forfeiture of property, 217,158 of fine and 842 of whipping. The amount of fines imposed was Rs. 10,22,955, of which a sum of Rs. 45,821 was paid to complainants under section 545 of the Code of Criminal Procedure. One thousand two hundred and sixty-six persons were bound over to keep the peace of whom 764 were not given any additional punishment. One thousand eight hundred and sixty-six persons were ordered to give security for good behaviour, and for failing to give such security 1,326 persons were imprisoned. Of the total sentences of imprisonment passed 3,470 were for periods of fifteen days and under (apart from those passed by village magistrates); the number of short sentences is still large and is very little less than that for 1915 (3,818). Three hundred and twenty-nine persons were released on probation of good conduct under section 562, Criminal Procedure Code, as against 390 in the previous year. A great reduction is noticeable in the number of punishments by confinement in the stocks (346 against 812 in 1915), in pursuance of the order of the Government directing the discontinuance of this form of punishment except in special cases.

Stocks.

Juveniles.

140. Two thousand eight hundred and ninety-eight boys and 431 girls were under trial during the year, chiefly for offences under special and local laws; of those who were convicted, the sentences of 37 were commuted to detention in the Reformatory School, 41 were discharged after admonition, and 22 were delivered to their parents or guardians. It is satisfactory to observe that the number of juveniles in jails fell from 146 in 1915 to 94 in 1916.

PRISONS. (1916.)

[*Report on the Administration of the Jails of the Madras Presidency, 1916; Statistics of British India, Part VI, Administrative and Judicial—Jails.*]

Accommodation.

141. The number of central and district jails remained the same as in the previous year, viz., 9 and 5 respectively. The sub-jail at Kokkarakulam in the Tinnevelly district was closed and one at Mummidivaram in the Gōdāvari district was opened; so the total number of sub-jails was the same at the end of the year as at the beginning, viz., 319. At the close of the year, there was accommodation in the central and district jails and in the Civil Jail, Madras, for 12,222 prisoners as compared with 12,086 at the end of the previous year. The increase was largely due to the construction of additional cells at Coimbatore and Bellary, to the construction of a hospital at Cannanore and to additional accommodation provided for civil prisoners at Vellore and Cuddalore. The daily average population for these jails was 10,169 and thus accommodation was sufficient and there was no overcrowding to any serious extent except in the case of civil prisoners.

Prisoners.

142. On the 1st January 1916, there remained in the jails and the sub-jails together a total population of 12,537 prisoners of all classes; 91,956

were admitted during the year and 92,066 discharged from all causes, leaving 12,427 in confinement at the close of the year. The daily average population increased from 12,181·25 to 12,440·07 in the year under review. The number of undertrial prisoners who remained in custody at the beginning of the year was 1,813; 40,156 were received during the year and 40,225 were discharged from all causes leaving 1,744 in confinement at the end of the year. The daily average number was 2,003·93 as compared with 2,034·70 in 1915. Sessions prisoners were detained in jail on an average for 26·52 days, which is an improvement over the previous year when it was 33·88 days, but those pending trial before magistrates were kept for 15·52 days against 14·75 in 1915. Of the total number of prisoners dealt with during the year, 37·98 per cent were convicted, 54·73 per cent were acquitted or discharged. Among this class of prisoners, there were 16 deaths and 33 escapes, of which 13 escaped from the District Jail, Cuddalore, and 20 from sub-jails. On the first day of the year 646 civil prisoners remained in custody and 4,185 prisoners were received during the year making a total of 4,831 dealt with; of these 4,227 were released, 20 were transferred, 5 died and 579 remained in jail at the close of the year. The daily average number was 474·10 as compared with 471·53 in the previous year, and was the highest on record. Six State prisoners remained in jails at the beginning of the year and six were in confinement at its close.

Undertrial Prisoners.

Civil Prisoners.

State Prisoners.

143. At the commencement of the year, the convict population stood at 9,830 males and 248 females; 21,532 males and 1,104 females were received during the year by direct committal as compared with 22,817 males and 1,068 females in 1915. Of those discharged during the year, 2,573 were released on appeal, 17,626 on expiry of sentence, and 3,080 under remission rules. Under the orders of Government, 190 convicts were released on account of sickness or other grounds. The number of convicts deported was 105, and 22 were transferred to the Lunatic Asylum at Madras. Six prisoners escaped and remained at large, 59 were executed and 129 died. The daily average number advanced from 9,675·02 in 1915 to 9,962·04 in 1916. Of the convicts admitted, 88·27 per cent were Hindus, 8·94 per cent Muhammadans, 2·78 per cent Christians and ·01 were Buddhists or Jains. The reduction in the number of convicts admitted under sixteen years of age from 146 in 1915 to 94 is noteworthy. The ratio per cent of convicts who had been previously convicted advanced from 11·21 to 13·84. The number of boys under fifteen years of age declined from 30 to 24 but the number of girls admitted was 15 as compared with 3 in the previous year. Twelve boys were transferred to the Reformatory School at Chingleput and the remaining 12 boys and 13 girls served their sentences in jails. The Tanjore District Jail for adolescents continued to be efficiently managed. The chief industries are carpentry, weaving and agriculture, and steps have been taken to teach such new industries as will be useful to the youths after release.

Convicts.

Juveniles.

144. There were eleven escapes from central and district jails during the year and ten from sub-jails. Of the eleven escapes from jails, nine were from inside and two from outside the jail. The number of convicts recaptured during the year was 25, including 10 who had escaped in previous years. The number of offences and punishments declined, the former from 8,799 to 8,524 and the latter from 8,859 to 8,619. There were nineteen cases of corporal punishment during the year as compared with seven in the previous year. Penal diet with or without solitary confinement was imposed in 185 cases as compared with 111 in the previous year. The ratio of punishments to the daily average population was only 86·52 per cent and is the lowest on record for the past fifteen years. On the 1st January 1916 there remained in confinement 3,678 habituals in all the central and district jails and 3,959 were received during the year, making in all 7,637 habituals dealt with. They formed 28·04 per cent of the convict population but received no less than 53·23 per cent of the punishments, and 18 of the 19 whippings awarded during the year were to habituals. During the year 3,070 convicts were released under the remission rules. Four convicts who came under the remission system failed to gain any

Conduct.

Habituals.

Remission.

remission. The largest remission of 1,021 days was earned by a convict sentenced to transportation for life released from the Trichinopoly Central Jail. The same prisoner earned the maximum gratuity of Rs. 58-15-6. Special remission for continuous good conduct for one year was awarded to 1,835 convicts as compared with 1,750 in the previous year. The system of paying prisoners in cash or by grant of remission for extra work performed was taken advantage of by fewer prisoners. Every jail has a

Education.

school attached to it and instruction is given by paid teachers assisted by literate convicts. The general course of instruction is reading and writing, the four rules of arithmetic and working out bazaar bills. The teaching is in the vernaculars, but in some jails English is also taught. The schools are being inspected by officers of the Educational Department. New school buildings are being built and school libraries and other equipment are being gradually provided. Religious and moral instruction is also given by the paid staff while several non-official gentlemen have delivered lectures on religious and moral subjects and presented money and books for jail libraries.

Vital statistics.

145. The admissions to hospital numbered 4,485 as compared with 4,297 in the previous year and there were 150 deaths as against 134 in 1915. The death-rate was 12·06 per mille as compared with 11·00 in the preceding year.

Sanitation.

146. At Rajahmundry a second oil-engine was provided for the drinking water well. A new pump was purchased for the aermotor of the big well in the Coimbatore Jail, and the well in the dhoby yard was provided with a pump. A deep well has been dug in the close prison compound of the Trichinopoly Central Jail. A new fly-proof kitchen with a new cooking-range was constructed in the Salem Central Jail. A clockwork patent fly trap was put up in the kitchen of the Penitentiary, and several improvements were effected in the kitchens of Madura, Tanjore and Vizagapatam jails. Cage latrines were built in the association wards of Rajahmundry and the old pattern latrines in the hospital and in three blocks were rendered fly-proof. All the latrines in the Coimbatore Jail were rendered fly-proof and new fly-proof latrines were put up at Salem. A new hospital was completed at the Cannanore Central Jail and fitted with up-to-date appliances.

Financial.

147. Excluding the outlay by the Public Works Department on buildings, the total expenditure of the year was Rs. 15,46,965 which exceeds that of the previous year by Rs. 38,462 owing to a larger outlay on manufactures and increased expenditure on account of petty construction and repairs. The total cost and cost per head under dietary charges fell owing to the issue of rice diet to a smaller number of prisoners and to more favourable rates obtained for rice, ragi and dhall. The total cost per head of maintaining prisoners was Rs. 83-0-5. The net cash earnings of prisoners rose from Rs. 1,62,653 to Rs. 1,74,904 and the average per head rose also from Rs. 42-7-0 to Rs. 46-11-0. The value of convict labour supplied to the Public Works Department amounted to Rs. 3,427. The net cost for maintaining prisoners decreased from Rs. 8,68,996 in 1915 to Rs. 8,57,964 in 1916 and the net cost per head of average strength from Rs. 71-5-0 in 1915 to Rs. 65-3-0 in 1916. The expenditure on jail buildings including the money spent by the Public Works Department amounted to Rs. 1,39,008 as compared with Rs. 1,58,762 in the previous year.

CIVIL JUSTICE. (1916.)

[*Statistics of the Civil Courts in the Madras Presidency for the year 1916*; *Statistics of British India, Part VI, Administrative and Judicial—Civil Justice.*]

Courts.

148. On the 31st December 1916, there were in the Madras Presidency the following permanent civil courts, viz., the High Court, the Presidency Court of Small Causes, the City Civil Court, 25 District Courts (including

three for Agency tracts), 30 Subordinate Judges' courts (including 11 for Agency tracts and one Revenue Officer exercising the powers of a Subordinate Judge), 156 District Munsifs' courts (including 22 for Agency tracts and 4 Revenue Officers exercising the powers of District Munsifs), and 127 Revenue courts. At the end of the year there were 20 temporary Subordinate Judges' courts and 29 temporary Additional District Munsifs' courts. Three new Subordinate Judges' courts were established at Chingleput, Cuddapah and Rajahmundry. A temporary Subordinate Judge's court was established in Bellary for nine months during the year. Two special Small Cause courts were established at Trichinopoly and Kumbakōnam, as a result of which the temporary Subordinate Judge's court and the Additional District Munsif's court at Trichinopoly ceased to exist. It was found necessary to continue all the Additional District Munsifs' courts except that at Trichinopoly. In addition four new courts had to be opened in June owing to the pressure of work and accumulation of arrears. Three members of the Indian Civil Service were selected to undergo judicial training. In addition to the regular courts, 5,817 village courts exercised civil jurisdiction during the year against 6,007 in 1915.

Litigation.

Number of suits.

149. The total number of suits instituted in the Presidency in 1916 was 543,716 against 555,020 in 1915. For the Presidency as a whole, one suit was instituted for every 76 persons as against one for every 75 persons in 1915 and the ratio for the Presidency town was one for every 28 persons as against one for every 25 in 1915. In the mufassal, North Malabar showed itself as usual the most litigious district with one suit for every 33 persons and, apart from the Agency tracts, Bellary was again the least litigious with one suit for every 259 persons.

Nature of suits.

150. The number of suits instituted for money or movable property was 467,010 or 89·25 per cent of the total as against 86·67 per cent in 1915, when the number of suits of this class was 481,014. The number of suits for immovable property other than mortgage suits was 23,355 against 21,707 in 1915, and the number instituted in revenue courts was 20,423 against 21,751 or 1,328 less than in the previous year. 27,020 mortgage suits were instituted against 24,724 in the previous year. The number of suits for specific relief was 4,856 against 4,723 in 1915.

Value of suits.

151. The total value of suits instituted in 1916 in courts other than village and revenue courts and unpaid tribunals was Rs. 936·15 lakhs, or Rs. 154·84 lakhs more than in the previous year. The average value of each suit was Rs. 242 against Rs. 202 in 1915. The number of suits above Rs. 500 in value was 22,506 against 21,968 in 1915—the highest figure on record.

Percentage of successful plaintiffs.

152. Apart from suits compromised or disposed of without trial, plaintiffs in 77·04 per cent of the suits disposed of during the year succeeded in obtaining decrees for the whole or part of the relief claimed against 78·09 per cent in 1915 and an average of 75·03 for the preceding five years.

Number of appeals.

153. The number of appeals preferred in 1916 was 16,454 or 823 more than in the previous year; the average for five years ending with 1914 was 15,502.

Courts of Original Jurisdiction.

Village Courts.

154. The total number of suits instituted in village courts was 136,516 against 145,587 in 1915. A large decrease was noticeable in all the districts except six. The number of suits disposed of by village munsifs sitting alone rose from 121,189 in 1915 to 125,488 in 1916, but there was a considerable fall in the number of suits tried by benches, 10,404 against 22,656 in 1915. The fall is evidently due to the correction of the mistaken procedure under which the disposals of village munsifs sitting singly in bench areas had been shown as the disposals of benches in the previous year.

Revenue Courts.

155. The total number of suits filed in revenue courts other than in Agency tracts fell from 21,664 to 20,324. The fall was most marked in Trichinopoly, Ramnad and Vizagapatam. There was an increase in Chittoor, Salem and Kistna. The total number of suits disposed of was

22,055 against 22,716 in 1915 and there was a slight reduction in the arrears. The average duration of contested suits rose from 173 days in 1915 to 198 days in 1916 but that of uncontested suits fell from 90 days to 66. The proportion of appeals preferred from the decisions of revenue courts to appealable decrees passed by them rose from 8·19 in 1915 to 10·24.

Agency Courts.

156. The number of suits instituted in Agency courts was 1,650 against 1,415 in 1915. The number of suits disposed of was 1,588 and 318 were left pending at the end of the year against 240 in the previous year. The average duration of contested suits rose from 94 days in 1915 to 131 days and that of uncontested suits remained as in last year, viz., 50 days.

District Munsifs' Courts.

157. In the District Munsifs' courts other than those for Agency tracts, 109,917 ordinary suits were instituted or 3,476 more than in the previous year and 4,630 less than in 1912, when the highest figure was recorded. The average total disposal for each court during the year was 2,111 against 2,144 in 1915 and 1,924 in 1914. Of the ordinary suits disposed of 58,057 were contested against 55,875 in 1915. The arrears of ordinary suits fell from 52,611 at the end of 1915 to 52,388 at the end of 1916 and the arrears of small causes fell from 23,873 to 22,572. The average duration of contested ordinary suits was 323 days against 339 days in the previous year and 345 in 1914. The average duration of uncontested ordinary suits rose from 55 to 56 days in the year. Considering that the District Munsifs' courts have had to deal during the last two years with an increase of suits to the extent of over 80,000 during which period their number has only increased by six, it is satisfactory that the arrears have increased by only 2,500 suits during that period.

District and Subordinate Judges' Courts.

158. In the Subordinate Judges' courts other than those for the Agency tracts, 2,394 ordinary suits and 21,205 small cause suits were instituted during the year against 2,242 and 29,263 in 1915 and the average of 1,849 and 30,421 for the five years ending 1914. The number of ordinary suits disposed of rose from 2,512 to 2,849 and the arrears increased from 2,416 to 2,438. 23,051 small cause suits were disposed of and the number left pending was reduced from 4,972 to 3,226. The average duration of contested ordinary suits in Subordinate Judges' courts was 559 days against 437 days in 1915 and it exceeded 250 days in all the Subordinate Judges' courts except two. The number of ordinary suits disposed of by District Judges after trial was 345 of which 269 were contested. The average duration of ordinary suits in district courts was 463 days against 570 in 1915 in the case of contested suits and 135 days against 128 in 1915 in the case of uncontested suits.

City Civil Court.

159. In the Madras City Civil Court, 501 suits were instituted against 470 in 1915 and 405 in 1914. The Judge disposed of 504 suits, of which 337 were contested and the rest uncontested. The average duration of contested suits fell from 387 days in 1915 to 234 in 1916 but that for uncontested suits rose from 39 days to 52.

Presidency Court of Small Causes.

160. In the Presidency Court of Small Causes, the number of suits instituted was 17,337 against 19,540 in 1915. The number of suits disposed of was 17,528 against 19,836 in 1915. The arrears decreased slightly. The average duration for contested suits rose to 37 days.

The High Court.

161. In the High Court, the number of suits instituted or received by transfer was 510 against 542 in 1915 and 448 in 1914. The number of suits disposed of was 598 against 566 in 1915 and 551 in 1914 and the arrears further decreased from 367 to 287, the lowest figure since 1908. The average duration of contested suits was 438 days. One prize case was instituted and disposed of in 1916.

Insolvency.

Mufassal Courts.

162. The steady increase in the number of insolvency petitions presented to the mufassal courts was maintained in 1916, the number instituted being 2,348 against 2,140 in 1915. The number of persons adjudged insolvent was 1,398 against 1,303 in 1915. Creditors' claims were admitted for Rs. 11,03,428 and the assets distributed were Rs. 4,51,477 against Rs. 2,41,875 in 1915. The number of insolvency petitions presented in the High Court during the year was 274 against 337 in 1915 and 278

The High Court.

were disposed of. Claims admitted during the year were Rs. 6,20,042 and the amount paid as dividend to creditors was Rs. 2,02,453.

Appellate Courts.

163. The number of appeals filed in Agency tracts fell from 123 in 1915 to 61 in 1916. The number of appeals disposed of was 64 and 8 were left pending at the end of the year. The average duration of appeals in these courts was 54 days against 31 days in 1915 and 46 in 1914 and the percentage of confirmation was 55 against 34·45 in 1915. Agency Courts.

District and Subordinate Judges' Courts.

164. In the District and Subordinate Judges' courts the number of appeals filed was 13,334 against 12,200 in 1915. The number of appeals pending for more than six months before Subordinate Judges rose from 625 to 1,175 while those before District Judges fell from 2,731 to 1,728. The average duration of appeals disposed of by District Judges was 430 days for uncontested and 316 for contested appeals.

The High Court.

165. The number of appeals from original decrees of mufassal courts filed in the High Court in 1916 was 428 against 451 in 1915. The number disposed of was 553 against 538 in the previous year and the arrears decreased from 850 to 725. The average duration of appeals disposed of was 548 days against 650 in 1915 and 883 in 1914. The number of letters patent appeals (other than original side appeals) filed was 289 against 243 in 1915. The number of appeals received against appellate decrees was 2,006 against 2,197 in 1915. The number of revision petitions filed in the High Court was 1,413, of which 797 were for the revision of decisions in small cause suits against 1,091 and 566 respectively in 1915. The number of petitions disposed of was 1,644 against 1,306 in 1915 and the arrears fell from 1,295 to 1,064. The number of cases referred by the lower courts to the High Court was 8. Seventeen cases were left pending at the end of 1915 and of the 25 cases for disposal, 18 were finished. Reference and revision.

Miscellaneous.

166. The total number of applications for execution received in all the courts in the mufassal taken together, except village courts, was 356,881 against 335,847 in 1915. Satisfaction was obtained in full in 16·66 per cent, part satisfaction in 7·79 of the applications disposed of, and the number of wholly infructuous applications rose from 252,258 to 266,285. The number of debtors imprisoned in execution was 2,300 against 3,169 in the previous year. 397 judgment-debtors were imprisoned in execution against 436 in 1915. Execution.

Inspections.

167. Nearly all the permanent District Munsifs did some inspection of village courts during the year. Ninety-five District Munsifs' and Subordinate Judges' courts were inspected.

Finance.

168. The total receipts of civil and criminal courts in the Presidency in 1916 amounted to Rs. 1,12,40,266 and the charges to Rs. 87,80,376, leaving a large surplus of Rs. 24,59,890. The charges include money spent on the upkeep of buildings and all other charges except pensions and cost of new buildings.

Shorthand writers.

169. All District and Subordinate Judges and selected District Munsifs of the first grade were specially empowered to dictate judgments to a shorthand writer in open court. The privilege was a considerable relief to those who used it.

REGISTRATIONS AND COMPANIES. (1916.)

[*G.Os. No. 1391, Home (Judicial), dated 5th July 1917, and No. 1392, Home (Judicial), dated 5th July 1917; Statistics of British India, Part II, Commercial, and Part VI, Administrative and Judicial—Registration —Indian Companies Act.*]

Offices.

170. No new offices were opened during the year so that the number of offices remains 513 as in 1915.

Registrations.

171. The decline in registration which marked the beginning of the war was checked about the middle of 1915, since when things have been steadily improving, people having become accustomed to abnormal conditions. The recovery has been so rapid that in 1916 registrations reached the record figure of 1,377,135, as compared with 1,285,051 in 1915 and 1,371,747 in 1912. Taking the figures for the triennium, the number of

registrations in the three years ending 1916 was 3,984,996, which is about 7,000 less than the number for the previous triennium. The general rise in prices during the last few years has caused a corresponding rise in the value of land, which is shown by the fact that whereas sales of all values have in the last fifteen years advanced by only ·63 per cent, those of property worth Rs. 100 and upwards have risen by 7·09 per cent. The effect of the war has been felt most severely in those districts which produce industrial crops for export, especially the groundnut area in South Arcot where there has been a marked decrease in registrations. The depression in the weaving industry seriously affected the districts of Madura and Ramnad. The tightness of the money market and the increasing activities of co-operative credit societies combined to cause a drop of 3·75 per cent in mortgages. There has been a continued advance in the registrations of wills and in the number of documents registered on behalf of co-operative societies.

Prosecutions.

172. The number of private prosecutions under the Act fell from 26 to 14 during the last three years, but departmental prosecutions rose in the same period from 26 to 29 of which 18 were for false personation.

Finance.

173. The total income for the triennium ending in 1916 was Rs. 70·18 lakhs as against Rs. 65·26 lakhs during the preceding triennium. In the same period the expenditure rose from Rs. 39·30 lakhs to Rs. 40·58 lahks. The income and expenditure in the year 1916 were Rs. 24·66 lakhs and Rs. 13·58 lakhs, respectively, as against an income of Rs. 22·71 lakhs and an expenditure of Rs. 13·70 lakhs in 1915.

Registered companies.

174. The year opened with 387 working companies, 344 limited by shares and 43 by guarantee. Seventeen were registered, 16 limited by shares and 1 by guarantee. Twenty-nine companies, 27 limited by shares and 2 by guarantee, ceased to exist. There were 374 working companies at the close of the year, 332 limited by shares and 42 by guarantee. Of the 17 new companies registered, 3 are European concerns. Whereas in the three years during which the present Act has been in force new registrations have almost maintained a dead level, the number of companies that have ceased to exist has shown a steady decline, thus indicating the beneficial effects of the Act in putting an end to unsound concerns. The fall of companies has been due chiefly to the launching of enterprises without foresight and out of season or without adequate expert knowledge among the chief office-bearers, the disappearance of the prime-mover in one-man concerns, dishonesty on the part of directors, competition by better-established rivals and, last but not least, the lack of co-operation among the constituents, of a proper business spirit in the supervising agency and of sustained zeal in the organizers. Of the 29 companies which ceased to exist, 13 were banking and lending firms, 5 were insurance companies and 7 were trading concerns. The new companies registered include 8 trading houses, 2 banks, 2 mills and presses and 2 mining companies. The aggregate increases in the authorized, subscribed and paid-up capitals were Rs. 29,17,837, Rs. 44,40,381 and Rs. 31,04,423, respectively. Of the last increase, nidhis absorbed about Rs. 20 lakhs, trading concerns Rs. 6 lakhs, planting companies Rs. 4½ lakhs and other companies half a lakh. There is ample scope for insurance work in India, but the lack of local expert knowledge on the subject stands in the way of any safe and appreciable extension by companies of this class established in India. The planting companies concern themselves mainly with crops not indigenous to the soil and here the lack of Indian enterprise is marked. There were several prosecutions for technical offences under the Act, but it is noteworthy that none of them were in Madras in spite of the number of companies there. The only serious case was that against the officers of the Permanent Investment Saving and Lending Society, Limited. Now that the Act has been in operation for three years its provisions, which at the outset were viewed as extremely stringent, are becoming better known and are receiving closer attention at the hands of companies, with the result that there is smoother working. The stagnation in joint stock enterprise in this Presidency may be attributed primarily to the financial stringency consequent on the war. It is probable also that the Indian

investor is holding his hand pending the results of the labours of the Industries Commission in order to see how far and in which directions the State will act as a pioneer in industries. One new provident insurance society was registered during the year and 4 ceased to work, reducing the number of working societies from 21 to 18. The constitution of the majority of these funds is crude and unsound. The dividing societies, i.e., those which collect monthly premia and devote a fixed percentage of the collections to meeting death claims or marriage bonuses, are, as a rule, promoted by a handful of organizers. From the percentage reserved for working expenses are met the establishment expenses, commission to agents and canvassers and contingencies, and the balance is divided amongst the share-holders. The profitable nature of this arrangement to the promoters is apparent from the fact that in one of these societies with a paid-up capital of Rs. 1,000 the annual profits appropriated by the nine share-holders during the first three years of the existence of the society average Rs. 6,600. Certificates of health are not demanded in the case of the insured and the rate of mortality amongst them is, as might be expected, high. Moreover, the subscriptions are fixed and do not vary with the age of the insured at the time of admission. The inspections by the Registrar during the last two years have hastened the end of several of those societies and it is satisfactory that the number has dwindled from 16 in 1914–15 to 7 in 1916–17. The next class of any importance is commonly known as "death-call societies." These do not collect monthly subscriptions, but make a call of a fixed amount on the occurrence of the death of a policy-holder, the amount collected less the expenses for issuing the calls being paid to the nominee. There is no provision in the present law to prevent the starting of societies of either of these descriptions, but the care which is taken to ensure that provident insurance societies comply with the Act is evidenced by the fact that, instead of the 123 societies which were working at the time of its introduction in 1912, the number now stands at 18.

Provident Insurance Societies Act, 1912.

175. The number of notarial stations and that of registering officers exercising the functions of Notaries Public remained the same as at the close of the previous year, viz., 140 and 178, respectively. The operations were performed at 17 stations against 18 in 1915–16. The decline in operations under bills of exchange, which is to be attributed to fewer transactions owing to the continuance of the war, was most marked in districts where an extensive trade in cotton and copra existed in the pre-war period. The scarcity of money consequent on the dislocation of commerce entailed by the war had the opposite effect on the notings and protests of promissory notes which rose in number mainly in Tinnevelly and South Malabar. Fees realized amounted to Rs. 255 against Rs. 533 in 1915–16 and a sum of Rs. 56 was expended by the Notaries Public.

Notaries Public. (1916–17.)

CO-OPERATIVE SOCIETIES.

(1ST JULY 1916 TO 30TH JUNE 1917.)

[*Annual Report on the working of the Co-operative Societies Act for the year 1916–17 ; Statistics of British India, Part II, Commercial.*]

176. On the whole the year was one of progress for the co-operative movement. The total cost to Government of working the Act was equivalent to ·807 per cent of the total working capital of societies as against ·869 in the previous year. The Madras Central Urban Bank, Limited, was converted into a Provincial bank, having agreed to throw open its shares to societies. The Vizagapatam District Supervising Union was converted into a banking union and banking unions were formed at Vellore and Berhampur. There was a great increase in the number of local administrative unions of societies, 27 fresh unions being registered during the year, thus bringing the total number to 56. The

General.

number of societies in the Presidency under the control of local or banking unions was 1,758 as against 1,212 of the previous year. There is reason to hope that practically all the primary societies in the Presidency will soon come under the scheme. As many as 421 societies were registered and the registration of six societies was cancelled during the year. There were on the 30th June 1917, 163,121 individual members in 2,216 societies (excluding 57 unions and the liquidated societies) against 136,286 in 1915–16, giving an average of 74 members to a society. The working capital of all societies rose from Rs. 168·89 lakhs to Rs. 204·99 lakhs and the paid-up share capital from Rs. 16·12 lakhs to Rs. 20·49 lakhs ; loans from central banks and other societies to societies other than central banks rose from Rs. 59·47 lakhs to Rs. 71 lakhs, and the reserve fund from Rs. 8·49 lakhs to Rs. 9·63 lakhs. An even larger sum could have been profitably employed by the societies had it been available ; but the banks were unable, owing to the general financial situation, to satisfy all the applications received. Out of 118,939 members of agricultural societies, 87,798 were pure agriculturists, 6,556 were Christians, 6,236 Muhammadans, and 5,623 were Panchamas. There was an increase of 870 in the number of Panchamas over that of the previous year.

Working of societies.

Provincial and District Banks.

177. Besides the newly constituted Provincial bank, there were thirteen central banks. The North Arcot District Co-operative Bank started work on 6th May 1917. Of the 206 members, 168 are societies registered under the Act. Sums amounting to Rs. 43,900 were lent to member societies. The Ganjām District Co-operative Bank started work on 8th October 1916 ; 25 individuals and 25 primary societies were admitted as members. Loans for Rs. 30,190 were issued to 17 societies. The Vizagapatam District Co-operative Union converted itself on 5th November 1916 into a banking union ; 87 members, of whom 45 are primary societies, were enlisted. Loans for Rs. 71,265 were issued to societies and Rs. 11,050 repaid by them. It is hoped soon to form central banks in six of the ten districts which still have none. The Christian Central Co-operative Bank started work on the 1st July 1916 with 71 individuals and 23 societies as share-holders. The working capital of the bank at the end of the year amounted to Rs. 46,233 and it lent Rs. 30,090 to primary societies and Rs. 35,000 to central banks. Both the Salem Bank and the Coimbatore Bank are admitting societies as share-holders, thus advancing a stage towards transformation into banking unions. The share capital of all the financing banks in the Presidency rose from Rs. 5·15 lakhs to Rs. 6·30 lakhs and their reserve funds from Rs. 1·51 lakhs to Rs. 1·93 lakhs. A few of the banks (notably Chingleput and South Kanara) are urgently in need of more share capital. Any great development of the co-operative movement must still largely depend on the banks succeeding in attracting deposits from outside the movement. In this the Provincial Bank (Rs. 30 lakhs) and the Trichinopoly Bank (Rs. 10 lakhs) have been far the most successful. The proportion of uncollected balance under instalments of principal and interest, taking all banks together, was considerably lower than in the previous year, the most marked improvement being in the collection of arrears of interest due in previous years.

Agricultural societies.

178. The number of agricultural credit societies on 30th June 1917 was 1,898 with unlimited and 9 with limited liability. The total working capital of the agricultural societies (credit and non-credit) including societies the registration of which has been cancelled, was Rs. 88·08 lakhs against Rs. 74·95 lakhs last year, and the paid-up share capital was Rs. 5·91 lakhs as against Rs. 4·53 lakhs. These societies worked at a net profit of Rs. 39,013. The net profit earned by agricultural societies for the year 1916-17 alone, i.e., the profit arrived at before the loss of the previous year was deducted, was Rs. 75,666. There remains still a very large amount of unrecouped loss standing against a majority of the societies. Of the loans due by members at the end of the previous year (Rs. 64·87 lakhs) 17·95 per cent was shown as overdue. Similarly 50·48 per cent of the previous year's unpaid interest was overdue at the end of the year under review. These figures are better than last year though there is room for

improvement. The total of the loans given by agricultural societies was Rs. 45·38 lakhs, of which Rs. 25·99 lakhs were for productive purposes. There was a considerable increase in loans given for payment of kist. There were 14 non-credit societies, 12 being purchase societies and two for production and sale. Five societies made joint purchases of seed and manure and sold them to their members. In only three cases were there joint sales of produce. A society was formed in the Ganjām district with the object of purchasing improved sugarcane crushers for hire to its members. Another undertook the manufacture of bone and phosphate manure. The manure was produced at a rate cheaper than that obtained in the open market and was sold at a small profit to the members.

Non-agricultural societies.

179. The progress in numbers and quality of non-agricultural credit societies continued. The number of limited liability societies increased from 97 to 140 while the number of unlimited liability societies rose from 37 to 56. The total working capital of the 196 non-agricultural credit societies was Rs. 25·622 lakhs against Rs. 19·916 lakhs in the previous year. These societies made a net profit of Rs. 83,312 against Rs. 61,372 in 1915–16. The collections continued to be good. In respect of current interest the percentage of balance to demand fell from 12·98 to 8·15 in the year under report. There was a slight improvement also in the collection of principal. There were at the end of the year 15 societies exclusively composed of Panchama members against 6 in the previous year. In 48 societies more than 50 per cent of the members were Panchamas. There were 17 non-agricultural societies for purchase, production and sale. The Triplicane stores had a turn-over of nearly Rs. 5 lakhs and showed a fair profit. Other stores were a failure. Two new building societies were formed, one for coolies and the other for fishermen.

Reserve fund.

180. The reserve fund increased from Rs. 8·49 lakhs to Rs. 9·63 lakhs. The increase is mainly contributed by central and non-agricultural credit societies.

Supervision.

181. There has been considerable development in the scheme for supervision of societies by local unions. These unions employ their own staff which works independently of the Government staff. Owing to the increased facilities given by central banks to local unions it is expected that before long the unaffiliated society will disappear and the necessity for detailed Government supervision will decrease.

LOCAL BOARD ADMINISTRATION. (1916–17.)

[*Statistics of British India, Part VIII, Local Funds—Local Boards.*]

Local Boards and Union Panchayats.

District Boards.

182. The Madras Local Boards Act, 1884, as amended in 1900, continued to be in operation in all the districts of the Presidency except Madras, where the Madras City Municipal Act, 1904, was in force. The number of district boards (25) remained unchanged. Except in the Nilgiris, where the minimum number of members excluding the president was 12, each board consisted of the Collector of the district, as ex-officio member and president, and not less than 24 other members, including the officers in charge of the revenue divisions. There were at the end of the year 759 members on the district boards, which was 14 less than in the previous year; the maximum strength remained unaltered. Of the members 124 were ex-officio, 283 were nominated by Government, and the remaining 352 were elected by the taluk boards; in 1915–16 the corresponding figures were 124, 292 and 357. Except in Koraput and the Nilgiris where there were no taluk boards, and in Gōdāvari, half the sanctioned members of each district board were elected by the taluk boards. 286 meetings were held by the district boards, eight less than in the previous year.

Taluk Boards.

183. There were in all 96 taluk boards as in the previous year and each consisted of a president and not less than 12 other members. The boards of Ellore, Chittoor and Cuddalore continued to elect their own

presidents and 28 others had non-official presidents. The sanctioned strength of the taluk boards increased from 1,753 to 1,764 ; the actual number of members at the end of the year was 1,648, of whom 383 were officials and 1,265 non-officials. The elective system, which was introduced in July 1909 and subsequently expanded, continued in force ; of the 340 seats open to election in the year, only 271 were actually so filled and in the case of those elections which were actually contested only 33·6 per cent of the registered voters came to the poll. Seventeen seats had to be filled up by presidents of district boards by nomination because no candidates were proposed. 1,248 meetings were held by the taluk boards, which was two more than in 1915–16.

Union Panchayats.

184. In all districts, except South Kanara and the Nilgiris, union panchayats assisted in the administration of local affairs in important villages. There were altogether 411 of these panchayats, excluding Bōdinayakkanūr in Madura which was constituted into a municipality from 1st September 1916, or three more than in the previous year. Each of them consisted of not less than five members, the headmen of the revenue villages wholly or partly included in the unions sitting ex-officio, and the other members being appointed by the presidents of taluk boards except in the case of twenty-seven selected unions where the members were partly appointed by election by the tax-payers of the unions. The number of panchayatdars fell from 3,924 to 3,918, of whom 889 were village headmen, 2,977 were nominated and 52 were elected. The functions of the unions were generally confined to conservancy and minor sanitary works and the construction, repair and lighting of the roads within their charges, but in some cases the management of choultries and markets was also added.

Receipts.

185. The land-cess was levied at 2 annas on every rupee of the land assessment in the Nilgiris (except a portion of the South-East Wynad, where the rate was 1 anna), at rates varying from 2 annas to As. 1–3 in Malabar, at As. 1–6 in South Kanara and at 1 anna in the remaining districts. In addition to land-cess, in South Arcot, Coimbatore, Cuddapah, Gōdāvari, Guntūr, South Kanara, Kistna, Kurnool, Madura, Nellore, Ramnad, Salem, Tinnevelly, Trichinopoly and Vizagapatam, a special cess of 3 pies in the rupee on the annual rent value of all occupied lands was levied for the construction of railways. In Tanjore a fourth of the receipts under land-cess which had hitherto been set apart for railway construction was credited to general funds. Tolls upon carriages, carts and animals were collected in all districts except in Guntūr. House-tax was levied in all unions, the maximum rates being in force in 342 cases, three-fourths in 62, two-thirds in one, and half rates in the remaining seven. Excluding the transactions under debt heads, the year opened with a balance of Rs. 1,63,02,532 or Rs. 16,99,687 less than in the previous year. The receipts rose from Rs. 1,78,70,534 to Rs. 1,79,74,070 ; excluding the receipts from the special railway cess, the revenue from rates and taxes rose from Rs. 88,55,607 to Rs. 90,35,355 owing to increases of Rs. 37,352 and Rs. 2,44,135 respectively which occurred under house-tax and tolls, but the collections under land-cess fell by Rs. 1,01,739. There was a rise under land-cess in nine districts, the increase being marked in Vizagapatam (Rs. 85,865) and Bellary (Rs. 30,253), but there was a fall in 16 districts, the decrease being specially marked in Ramnad (Rs. 57,076), Guntūr (Rs. 46,570), Kurnool (Rs. 36,576) and Tanjore (Rs. 29,315). The income from tolls showed an increase in 19 districts, a noticeable rise having occurred in North Arcot (Rs. 53,174), Ramnad (Rs. 26,931), Tinnevelly (Rs. 26,848), Vizagapatam (Rs. 24,978) and Chingleput (Rs. 21,952). The grants received from Provincial funds amounted to Rs. 41,69,966 of which Rs. 16,32,658 were contributed in aid of the general resources of local boards, Rs. 2,53,265 were granted for roads and bridges, Rs. 46,441 for the maintenance and equipment of hospitals and dispensaries, Rs. 2,99,000 for minor sanitary works, Rs. 60,000 for the Rāmēswaram water-supply and Rs. 29,438 for choultries. The grants for public works were paid as usual to the district boards of the Nilgiris

(Rs. 1,00,600) and Koraput (Rs. 23,750) in consideration of the smallness of their revenues. The educational grants took the shape of lump assignments intended to enhance the board's resources so as to enable them to equip and maintain their own elementary schools adequately. The grants towards hospitals and dispensaries represented the Provincial share of the pay and allowances of the medical subordinates employed by the local boards and half the cost of the maintenance and equipment of hospitals and dispensaries opened after 1915; the grants for choultries consisted mainly of the lump payments made to local boards in lieu of the income from lands originally assigned for the maintenance of choultries by their founders and subsequently resumed by the Government.

Expenditure.

186. Excluding the charges relating to debt heads and the contributions from one district board to another and an expenditure of Rs. 14,41,470 which, though debited to service heads, was met from loans which were credited to debt heads, the total expenditure of the local boards fell from Rs. 1,90,93,905 to Rs. 1,74,71,802 and the year closed with a balance of Rs. 1,68,04,800.

Public Works.

187. The outlay on public works fell from Rs. 95,60,952 to Rupees 77,19,753; Rs. 26,51,894 were spent on the construction of roads, bridges, school-houses, dispensaries, markets and other miscellaneous public improvements and the remainder on repairs to existing works. The length of the new roads constructed was 125 miles; it was 76 miles less than in the previous year; the expenditure on this account fell from Rs. 2,85,480 to Rs. 2,58,380. 24,796 miles of roads were repaired against 24,523 in 1915-16, but the outlay thereon fell from Rs. 48,64,614 to Rs. 44,12,912. All the district boards except Koraput maintained their own engineering establishments; the Public Works Department had charge of all local fund works in Koraput, in addition to certain roads running along tank and canal banks and a few special roads and bridges in other districts.

Education.

188. The educational institutions maintained by the local boards at the close of the year consisted of 48 sessional schools for the training of teachers, one Sanskrit college, 70 secondary and 6,548 elementary schools. In the sessional schools, 1,488 students received instruction and the attendance at all the schools on the 31st March 1917 was 326,904 boys and 73,887 girls against 326,515 boys and 75,536 girls in the previous year. Teaching grants to private institutions were disbursed directly from Provincial funds instead of through the agency of the local boards. The total expenditure incurred by local boards on educational objects was Rs. 29,89,378, towards which Rs. 3,99,162 were contributed by fees collected from pupils and Rs. 15,78,029 by Provincial funds. The net local fund outlay was thus Rs. 10,12,187, or 13·3 per cent of the total ordinary income of the local boards.

Medical institutions.

189. The local boards maintained 123 hospitals and 279 dispensaries against 124 and 273, respectively, in the previous year; the cost of maintenance declined from Rs. 9,47,346 to Rs. 9,27,612, but the number of patients treated at them rose from 4,385,177 to 4,545,402.

Vaccination.

190. The district boards employed 716 vaccinators (including probationers) against 721 in the previous year. The average cost of each successful operation increased from As. 3-6 to As. 3-11.

Sanitation.

191. The expenditure on sanitation was Rs. 12,57,214 against Rupees 16,33,430 in 1915–16; special attention was paid to rural water-supply so far as funds permitted.

Railways.

192. The only district boards which possessed open railways were those of Coimbatore, Tanjore, Guntūr and Kistna; new lines were under construction in the districts of Salem and Tinnevelly, as also a further extension of the railway in Tanjore. The balance in favour of the railway guarantee fund of the Tanjore District Board at the beginning of the year was Rs. 28,55,800 in Government securities and Rs. 73,498 in cash. The gross traffic earnings increased from Rs. 10,05,282 to Rs. 10,19,000,

and the working expenses also rose from Rs. 5,64,027 to Rs. 5,83,364. The district board repaid Rs. 71,051 to Provincial funds towards the recoupment of the Government share in the railway, which is treated as a loan; it paid Rs. 32,530 to debenture holders as interest and Rs. 21,520 to the sinking fund towards the liquidation of the debenture loan. The profit derived from the working of the railway was Rs. 4,35,636, or 8·04 per cent of the capital outlay, and at the end of the year the balance in favour of the fund, after taking into account all charges (inclusive of a sum of Rs. 3,60,097 debited to the head " construction of railways ") and receipts was Rs. 28,55,800 in Government securities and Rs. 81,714 in cash. In view of the difficulty of selling the Government securities in hand, the Board borrowed on their pledge a sum of Rs. 2,43,000 from the Bank of Madras for the construction of its railway in the year. In Kistna the opening balance of the railway cess fund was Rs. 16,68,500 in Government securities and Rs. 3,04,527 in cash; the gross earnings of the railway declined from Rs. 4,18,796 to Rs. 3,82,728 and the working expenses also fell from Rs. 1,89,097 to Rs. 1,73,408. The District Board repaid a sum of Rs. 1,35,448 to Provincial funds towards the loan taken from Government for the construction of the line. The profit derived from the working of the railway was Rs. 2,09,320 or 9·4 per cent of the capital outlay, and the closing balance in favour of the fund was Rs. 19,70,000 in Government securities and Rs. 2,75,528 in cash. In Coimbatore the opening balance of the railway cess fund was Rs. 7,08,200 in Government securities with a cash deficit of Rs. 1,63,332. The gross earnings of the railway were Rs. 1,60,791 and the working expenses were Rs. 78,819. The District Board paid a sum of Rs. 1,08,551 towards the capital and interest on the loan borrowed from the public and the Bank of Madras. The profit derived from the working of the railway was Rs. 81,792 or 7·81 per cent of the capital outlay, and at the end of the year the balance in favour of the fund was Rs. 7,08,200 in Government securities and a cash deficit of Rs. 40,935. The net earnings of the railway in Guntūr amounted to Rs. 53,405 or 3·7 per cent on the capital outlay. The Salem-Suramangalam line in the Salem district and the Tirutturaippūndi-Vēdāranniyam line in Tanjore were completed towards the end of the year and the former has since been opened for traffic.

MUNICIPAL ADMINISTRATION—MUFASSAL. (1916–17.)

[*Statistics of British India, Part VIII, Local Funds—Municipalities.*]

General.

193. The new municipality of Dhārāpuram began actual work on 1st April 1916, and the unions of Chittoor and Bodinayakkanūr were constituted municipalities in the year.

Constitution of Councils.

194. The maximum strength of the councils increased from 1,121 to 1,162 owing to the opening of three new councils and to additions to the elective strength of the Adōni, Bezwada, Cannanore and Guntūr councils. The actual strength of the various councils at the end of the year was 1,089 members of whom 89 were ex-officio, 452 nominated by Government and the remaining 548 elected by the rate-payers; 190 members were officials and 899 non-officials, against 186 and 833 respectively in the previous year. The municipal councils of Tiruvannāmalai, Walajapet, Chidambaram, Adōni, Bellary, Chittoor, Cuddapah, Proddatūr, Berhampur, Peddāpuram, Narasaraopet, Tenali, Ellore, Kurnool, Nandyal, Bodinayakkanūr, Periyakulam, Mannārgudi, Negapatam, Srīrangam and Anakāpalle consisted entirely of Indian members. The councils held 1,874 meetings or 113 more than in the previous year, and 68 others were adjourned for want of a quorum; the average attendance of councillors at each meeting was 59·2 per cent of the total strength. The system of appointing municipal councillors by election was in force in 61 municipalities.

Receipts.

195. The opening balance was Rs. 39,42,296 against Rs. 45,02,533 in 1915–16 and the current receipts increased by Rs. 7,48,233 to Rs. 87,30,202,

the increase occurring mainly under "advances recovered" and "rates and taxes", compensated partly by a reduction in the receipts under "grants from Provincial funds." The income realized from the tax on buildings and lands, the water and drainage tax and the tax on arts and professions amounted to Rs. 16,82,718, Rs. 8,36,427 and Rs. 2,94,043 respectively. The income from tolls and from educational institutions rose from Rs. 6,96,637 and Rs. 2,80,623 to Rs. 7,49,476 and Rs. 2,87,441. The grants and contributions paid by Government amounted to Rs. 13,78,882 in 1916-17 and consisted of Rs. 10,99,855 paid for general purposes, Rs. 2,08,426 for education and Rs. 70,601 for medical purposes. The necessity for economy in view of the financial stringency accounted for the fall of over Rs. 6 lakhs in Provincial grants. Government grants.

196. The Māyavaram Municipal Council raised a loan of Rs. 7,500 from the Tanjore District Board for acquiring land for the construction of a hostel. Loans advanced to municipal councils by Government amounted to Rs. 2,16,820 against Rs. 1,36,380 in 1915-16. The municipal councils of Erode, Tirupati and Negapatam borrowed Rs. 47,000, Rs. 70,670 and Rs. 18,350, respectively, for expenditure on water-supply, while the municipal councils of Anakāpalle, Parlākimedi and Vizagapatam borrowed Rs. 9,500, Rs. 3,000 and Rs. 10,000, respectively, for expenditure on survey. The Vellore Municipal Council borrowed Rs. 29,600 for its drainage scheme and the Salem Municipal Council Rs. 28,000 for a town extension scheme. The Government advanced a sum of Rs. 2,000 to the Bodinayakkanūr Municipal Council to enable it to start work as a municipality. **Loans.**

197. The average incidence of municipal taxation per head of the population rose from Rs. 1-10-11 to Rs. 1-12-0. The incidence was relatively high, as was natural, in the hill municipalities of Coonoor, Kodaikānal and Ootacamund, being Rs. 5-11-3, Rs. 7-12-1 and Rs. 7-5-5, respectively; in the plains it ranged from Rs. 3-7-10 in Tuticorin to As. 13-8 in Cannanore. **Incidence of taxation.**

198. Expenditure amounted to Rs. 92,74,441 against Rs. 85,44,627 in 1915-16. The increase occurred chiefly under capital outlay on drainage works and under "advances recoverable." The expenditure on public works amounted to Rs. 36,34,443 which was Rs. 2·16 lakhs more than in the previous year. The water-works of Ellore, Erode, Masulipatam, Anantapur, Bellary, Chingleput, Cuddalore, Narasaraopet and Tuticorin, the improvements and extensions to existing water-works at Kumbakōnam, Kurnool, Madura and Tirupati and the drainage schemes for Madura and Vellore were under execution by the Public Works Department. Water-supply schemes for Calicut, Cochin, Mangalore, Palni, Parlākimedi, Peddāpuram, Rajahmundry, Srīrangam, Tiruvālūr and Tiruvannāmalai, improvements to existing works at Conjeeveram, Guntūr, Tanjore, Trichinopoly and Vellore, drainage schemes for Adōni, Berhampur, Bezwada, Bimlipatam, Calicut, Chingleput, Cocanada, Ellore, Kumbakōnam, Negapatam, Parlākimedi, Rajahmundry and Salem and improvements to drainage works at Ootacamund were either under investigation or preparation by the Sanitary Engineer, or under the consideration of the Sanitary Board, the Chief Engineer or Government. **Expenditure.** Public Works.

199. In each municipality there was at least one hospital or dispensary open to the public. The hospitals at Ootacamund and Vizagapatam remained under private management but received aid from municipal funds, while in Chittoor and Virudupatti which were newly constituted municipalities, the local boards continued to maintain the hospitals. The institutions in the other towns were maintained by the municipal councils themselves, a portion of their maintenance charges being generally contributed by the local boards. The number of in-patients treated in these institutions was 45,354 and that of out-patients rose from 2,350,394 to 2,503,717. The cost of maintenance was Rs. 6,55,897 against Rs. 6,58,451 in the previous year. There were 562 educational institutions maintained by municipal councils, or 26 more than in 1915-16; they consisted of three Medical relief. Education.

colleges, 25 secondary schools and 534 elementary schools ; the attendance at schools within municipal limits rose from 241,599 to 244,392. The councils also aided 366 elementary schools with teaching grants. The

Sanitation and lighting.

expenditure on conservancy was Rs. 11,04,512 and that on lighting Rs. 3,16,736 against Rs. 13,08,157 and Rs. 2,86,174 in 1915–16.

Debt.

200. The public debt outstanding against the several municipalities was Rs. 30,48,014, towards the repayment of which there were sinking funds to the extent of Rs. 1,07,000.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS. (1916–17.)

[*Statistics of British India, Part VIII, Local Funds—Municipalities.*]

Financial.

201. The total receipts of the Corporation including the opening balance amounted to Rs. 55,74,189 and the expenditure to Rs. 46,34,399, against Rs. 54,58,619 and Rs. 45,30,719 respectively in 1915–16. The income from municipal rates and taxes was Rs. 22,44,355, or Rs. 2,19,708 more than in the previous year. This large increase was chiefly due to the lighting tax rate having been raised from 1¼ to 2 per cent and also to cursory as well as general revisions of assessment. The incidence of taxation per head of the population was Rs. 4-5-3 against Rs. 3-14-5 in 1915–16. The revenue derived from municipal property and powers apart from taxation was Rs. 5,65,478, or Rs. 39,466 more than in the previous year. This increase was chiefly due to a larger import of timber by sea during the year. The grants and contributions from Government amounted to Rs. 1,38,126 as against Rs. 7,60,957 in 1915–16 and were made up of the usual annual contribution amounting to Rs. 40,126 and a special grant of Rs. 98,000 for minor sanitary works. The miscellaneous receipts rose from Rs. 1,96,804 to Rs. 2,08,613, the increase occurring chiefly under payment for water used for non-domestic purposes. A loan of Rs. 14 lakhs was raised in the market during the year for improvement of water-supply and drainage and for extension of electric lighting. The debt at the close of the year was Rs. 97,95,094. A sum of Rs. 38,846 was paid towards Government instalment loans and Rs. 3,55,560 towards interest on all loans. The sinking funds at the end of the year on account of the several loans, excluding the Government instalment loans, amounted to Rs. 26,02,300 in Government promissory notes and Madras municipal debentures and Rs. 1,218 in cash.

Works.

202. The expenditure on works amounted in all to Rs. 26,66,636, or 57·5 per cent of the total expenditure, as against Rs. 24,99,786 in the previous year. Of this sum Rs. 15,37,671 or 33·2 per cent was spent on new works, Rs. 9,39,664 or 20·2 per cent on repairs, Rs. 1,52,950 or 3·3 per cent on establishment and Rs. 36,351 or 0·8 per cent on tools and plant, etc.

Communications.

203. A sum of Rs. 14,577 was spent on new works such as acquisition of lands and buildings for widening roads and rounding off corners, and the construction of a foot-path from Parry's corner to Napier Bridge. The amount spent on repairs was Rs. 3,09,636 against Rs. 3,89,653 in 1915–16. During the year 43·46 miles of road were re-formed against 59·30 miles in the previous year ; 2 miles, 7 furlongs and 82 yards of unmetalled roads were metalled and 1 mile and 29 yards of roads were tar-sprayed for the first time. In addition, 2 miles, 6 furlongs and 48 yards of roads were retarred, and an experimental length of voidless asphaltic road surface was laid in Mount Road near the Munro statue.

Buildings.

204. The expenditure on new works was Rs. 1,21,066 and that on repairs Rs. 37,302. The improvements designed to make the present building in Barracks Square suitable for use as a hospital for the treatment of infectious diseases were completed and drainage and sanitary fittings to the Raja Sir Ramaswami Mudaliyar's Lying-in Hospital were in progress. The three school-buildings that were in progress in the

previous year were completed and steps were taken for the acquisition of a site for a model school in Ubbarapalaiyam. The old "B" conservancy depot in Basin Bridge Road was altered and repaired so as to make it suitable for use as a model cow-house and additions to the central fire station in Pudupet were completed. Improvements to three conservancy depots were effected and to three more were in progress. Seven flush-out latrines that were in course of construction in the previous year and eight others were completed and the construction of a pail depot at Lang's Garden was in progress. The rhinoceros enclosure in the menagerie at the People's Park was converted into a lion enclosure by adding two masonry rooms and erecting a high iron bar fence.

Drainage.

205. The amount spent on new drainage works was Rs. 6,46,273 and on maintenance Rs. 4,19,600. The construction of deep gravitation mains and intercepting sewers in the Napier Park and Purasawakam areas was completed and sewer-laying in the Royapuram area was continued up to the end of January 1917 when the work had to be stopped on account of the shortage of stoneware pipes. The storm water drainage in North Triplicane, which was in course of construction in the previous year, was completed and similar work in Moor Street, Georgetown, was in progress. The Kelly's drain was further extended by 220 feet seawards and the three portions of the anti-malaria drainage scheme known as Brick-kiln Road south, Brick-kiln Road north and Strahan's Road in the Purasawakam area were completed. The work of altering house drains in the Tondiarpet area was continued during the year as well as that of laying sewers and construction of side-drains.

Water-supply.

206. The expenditure on water-supply was Rs. 10,20,481, of which Rs. 8,49,341 related to new works and Rs. 1,71,140 to maintenance. All the new filter-beds (fourteen in number) were brought into use for the first time, in November 1916. The extension of the water-supply distribution system was continued during the year in accordance with the restricted programme. The quantity of water supplied during the year was 4,982·34 million gallons, which was equivalent to 26·30 gallons per head per day. The maximum average daily consumption per head in any month was 29·78 gallons and the minimum 22·89 gallons. House-to-house inspection for prevention of waste of water was continued during the year and leaky fittings in 5,495 houses were detected and rectified. A length of 114,400 feet of water pipes was laid under the new scheme during the year making a total of 338,400 feet. Under ordinary works, 10,069 feet of old pipes were cleaned and relaid, 4,153 feet of old mains were renewed and 15 valves, 35 stop-cocks, 3 hydrants, 4 pumps and 64 meters were fixed. The quantity of water supplied to the City as measured at Red Hills was 848,983,248 cubic feet against 899,476,812 cubic feet in the previous year.

Education.

207. The expenditure on education was Rs. 39,416 against Rs. 32,301 in the previous year, the increase being due to the establishment of five new schools. The total number of schools maintained by the Corporation was 21 and there were 2,338 boys and 404 girls on the rolls of these schools on 31st March 1917. There were 124 teachers in the Corporation schools and most of them were qualified. Nine teachers were under training in the Government Training School, Saidapet, and one in the school at Triplicane. Stipends were paid to these teachers.

Sanitation and Medical Services.

208. The cost of maintenance of the Corporation hospitals and dispensaries amounted to Rs. 86,652 against Rs. 86,902 in 1915-16. The total number of patients treated in them was 172,359 as against 207,431 in the previous year, the decrease being due to the Georgetown Dispensary having been taken over by Government from 1st May 1916. The usual contribution of Rs. 20,000 to Government on account of hospitals and contributions to other medical institutions amounting to Rs. 12,638 were paid.

Vaccination.

The amount spent on vaccination was Rs. 15,250 against Rs. 14,384 in 1915-16 and the total number of cases vaccinated in the city in the calendar year 1916 was 65,832. The percentages of success in primary vaccination and re-vaccination cases were 96·87 and 65·52 respectively, as against 96·31

and 56·80 in 1915. The number of children under one year vaccinated was 16,053. The expenditure on registration of births and deaths was Rs. 18,704 as against Rs. 18,573 in 1915-16. The number of births and deaths registered in 1916 was 21,675 and 17,872 as against 18,331 and 18,688 respectively in 1915. The birth and death rates were respectively 41·8 and 34·5 per mille as against 35·3 and 36·0 per mille in 1915. There were 17 imported cases of plague of which 11 proved fatal. 138,611 rats were caught and destroyed making a total of 2,099,555 since the beginning of the operations in July 1898. A sum of Rs. 4,53,839 or 9·79 per cent of the total expenditure was spent on sanitation and conservancy during the year 1916-17 as against Rs. 5,65,413 in 1915-16.

Births and Deaths.

Plague.

Anti-Malarial Operations.

209. The amount spent on anti-malarial operations in 1916 was Rs. 67,342 as against Rs. 1,50,266 in 1915. The mosquito and malaria survey having been completed in the previous year, the usual preventive measures were undertaken during the year in the known malarial zones and in the breeding grounds of the malaria-carrying anophelene mosquitoes in and around these zones. Malaria accounted for 4·3 per cent of the total deaths as against 9·0 in 1915, which gives a malaria death-rate of 1·5 per mille against 3·3 in 1915.

Miscellaneous.

210. A sum of Rs. 1,62,980 was spent on lighting and the cost of maintenance alone amounted to Rs. 67,905. Two hundred and seventy-seven new electric lights were installed and eight were removed. The number of electric lights on 31st March 1917 was 2,138. There were also 4,374 oil lamps and two power lamps. The public parks were maintained at a cost of Rs. 38,653 as against Rs. 36,978 in the previous year. The cost of maintenance of fire-engines was Rs. 14,925 against Rs. 12,086 in 1915-16. The engines were requisitioned for 12 fires as against 7 in 1915-16.

MILITARY (VOLUNTEERING). (1916-17.)

211. There were 13 volunteer corps attached to the 9th (Secunderabad) division, as in the previous year. Of these, nine corps had their headquarters in the Presidency ; the other four corps were located at Hyderabad, Bangalore, Kolar and Coorg. Of the total number of volunteers, 8,369 were extra-efficient and 1,211 were efficient, against 8,179 and 1,672, respectively, in the previous year. Thirty-eight men belonging to three corps were non-efficient. At Madras, a large number of the Volunteer Guards and Artillery Volunteers continued to be mobilized for garrison duties. The Malabar Volunteer Rifles and the South Indian Railway Volunteer Rifles also mobilized considerable detachments for actual military service. A very large number of volunteers proceeded on active service in various capacities. Many officers and men received commissions in the Indian Army Reserve of Officers. Others have enlisted in the regular army, while the Madras Volunteer Guards have sent a number of men out as machine gunners, despatch riders and motor-boat drivers. One hundred and fifty-four of the Madras Artillery Volunteers are now on active service. At the end of the official year the inauguration of the Indian Defence Force put a stop to volunteering as such, but the new conditions cannot be said to have been fully operative until the beginning of 1917-18.

MARINE. (1916-17.)

[*Reports of the Madras Port Trust and the Madras Port Department for 1916-17 ; Statistics of British India, Part VIII—Local Funds.*]

Madras Port Trust.

212. In the year under review the receipts of the Trust from all sources were Rs. 13,13,310 against Rs. 11,66,697 in 1915-16. This represents an increase of 12·56 per cent. But Rs. 1,14,998 of the receipts were ascribable to the 25 per cent super-dues on exports and imports. The

gross expenditure out of revenue—not counting contributions made by revenue to capital or repayment of debt—was Rs. 11,92,825 or the equivalent of 90·82 per cent of the gross receipts. Excluding from working expenses the interest on loans, which in the year under review came to Rs. 4,92,151, actual working expenses came to 53·35 per cent of actual harbour earnings against 50·81 per cent in 1915-16. The increased percentage is attributable to heavy payments made for claims, due to the adverse judgment in the "cotton case" and to law charges. The average cost per ton of goods passed through the port by the Trust's own agency was Rs. 3·18 or, if the whole of the goods passing through be counted, including those not handled by the Trust, the average cost was Rs. 1·95 per ton. The harbour dues alone, i.e., excluding the charges for specific services such as cranage and storage, came to Rs. 8,22,787. The average charges paid by shipping came to about As. 1·82 per net registered ton.

213. The whole of the substructure and the greater part of the top work of the west quay were completed during the year, and fair progress was made with the paving of the roadway at the back of the quay. The completion of this quay practically doubles the enclosed area available for steamers, and will add four first-class berths. The dismantling of the two steel piers, begun last year, was practically completed. The hydraulic cranes from these piers have been installed on the west quay in groups, intermediate to the berths where vessels lie alongside, and are used for handling cargo into and out of barges. The railway booking offices at the ends of the platforms opposite the transit sheds were completed and brought into use during the year. The southern grid-iron sidings of the railway yard were completed during the year. The old entrance to the present Beach station yard has been closed and a new temporary connexion with the harbour main line has been laid, pending remodelling of the Beach station yard. The new road to the east of the Beach station was completed and brought into use during the year. The shifting of the workshops to the present site at Springhaven, close to the water's edge and alongside the slipway, has without doubt greatly facilitated the repairs to the fairly large and valuable fleet of floating craft. The whole workshop yard throughout has been connected up with metre gauge lines and turntables, so that any work coming in for repairs from the floating craft can be picked up by the hand crane on the little jetty in the buoy repairing yard, loaded on a metre gauge truck and wheeled into any of the shops. Land machinery coming in for repairs is brought into the running shed, which is also connected up by metre gauge lines to the various shops. About the close of the year all the works required as a result of handing over the old engineering yard to the South Indian Railway, were completed and the old yard was vacated. The work of removing the damaged part of the breakwater was commenced in February 1917 and by the end of March 206 blocks, aggregating 84,188 cubic feet, had been removed by the all-round titan crane and by the steam barge "Wenlock"—the latter picking up blocks beyond the reach of the crane and placing them so as to be subsequently picked up by the crane. Of the slice-blocks and wave-breakers recovered from the wreck, 138 blocks of 56,966 cubic feet were deposited in places where the cyclone had dragged outwards and thereby weakened the wave-breaker protection of the breakwater. Such of the slice-blocks as were in sound condition were reserved for use in the restoration work. Works.

214. The tonnage of imports, amounting to 428,937 tons in 1916–17, showed an increase of 46,460 over the figures for the previous year, but the quantity of coal imported by sea fell by 58·6 per cent. In addition to coal, the chief falling off in comparison with the previous year was in metals, railway materials and cotton manufactures. There was a considerable increase in the imports of mineral oil and a slight increase in sugar. There was an increase of 8,464 tons in the imports of teak from Burma, while no timber was received from Australia during the year. As anticipated last year, there was a decrease in imports of iron and steel, 7,872 tons being received against 12,513 tons last year. Imports of Trade.

piece-goods still showed a downward tendency, the figure for 1916–17 being 9,435 tons against 11,203 tons last year. The sugar imported showed an increase of 14 per cent. Imports of mineral oil increased by 27,822 tons, or nearly 42 per cent. Imports of railway materials fell by 6,886 tons or nearly 35 per cent. The hopes entertained in regard to the shipment of groundnuts for this year were not realized, as only 61,868 tons were exported from Madras as compared with 97,200 tons last year. Out of this quantity, 40,531 tons went to Europe and 21,337 tons to coast ports. Only 3,936 tons of cotton were shipped during 1916–17 as against 5,809 tons last year. Salt and hides and skins were shipped in larger quantities than in the previous year, the increase in the tonnage of these commodities being 2,161 tons and 3,943 tons respectively. There was a falling off of 502 tons in the shipment of tea, the figures for 1916–17 being 2,298 tons. The value of the private trade in foreign merchandise from foreign ports in the year under review amounted to Rs. 10,47,15,893 against Rs. 9,25,88,759 for the year 1915–16, showing an increase of Rs. 1,21,27,134 and was 13·1 per cent above last year's record and 11·1 per cent above the previous ten years' average. In Indian merchandise from Indian ports, the trade rose to Rs. 1,69,95,605 from Rs. 1,15,81,467 for the previous year, showing an increase of 46·7 per cent over that of the previous year. For Indian merchandise to foreign ports, the figure for the year 1916–17 rose from Rs. 8,58,89,607 for the previous year to Rs. 9,54,87,004 and was 41·5 per cent over the ten years' average. The value of Indian merchandise to Indian ports was Rs. 95,03,041 against Rs. 95,16,217 for the previous year, showing a decrease of Rs. 13,176.

Minor ports. Finance.

215. The receipts of Port, Marine and Coast Lights funds were Rs. 9·83 lakhs and the expenditure was Rs. 15·52 lakhs. The closing balance consisted of Rs. 5·84 lakhs in cash and Rs. 14·16 lakhs in Government securities. Though the number of vessels increased, their total tonnage fell considerably, owing chiefly to country craft having largely replaced steamers in the coastal trade. The aggregate value of the sea-borne trade amounted to Rs. 27·48 crores as against Rs. 27·40 crores in the preceding year, but the volume of trade was, except in a few cases, considerably less than in the previous years. The great rise in prices accounts mainly for the increase in value with a decline in bulk. The collection of port dues fell to Rs. 1·75 lakhs and coast lights dues to Rs. ·78 lakh. Tuticorin was the chief minor port with import trade valued at Rs. 154·46 lakhs and an export trade of Rs. 590·30 lakhs. 504,127 passengers arrived at and sailed from the various outports; Dhanushkodi continued to maintain its place as the foremost port in the matter of passenger traffic. Rs. 2·72 lakhs were spent on Public Works. Several sanctioned schemes designed to improve the landing and shipping facilities of certain outports could not be carried into execution in view of the present financial conditions. In connexion with the Tuticorin harbour scheme, borings were taken which pointed to the feasibility of a thirty-foot channel.

General.

216. The dearth of steam tonnage and high rates of freight attracted a large number of country craft to coastal trade and also offered a stimulus to the revival of the wooden ship-building industry at the principal centres, e.g., Cocanada, Masulipatam, Calicut and Cochin. At Masulipatam alone the construction of no less than four vessels of fairly large size was undertaken during the year and two with an aggregate tonnage of 560 tons were launched. There were twenty cases of shipping casualties of ordinary importance during the year, only one of which was attended with loss of life. Dredging operations for the maintenance of boat channels were conducted at the ports of Cocanada, Cuddalore, Negapatam and Tuticorin. A case of piracy occurred in the vicinity of Cochin during the year; the culprits were all apprehended and sentenced to imprisonment.

MORTALITY CAUSED BY WILD ANIMALS AND SNAKES. (1916.)

[*Report on the measures adopted for the destruction of wild animals and snakes during the year 1916; Statistics of British India, Part V, Area, Population and Public Health.*]

Mortality.

217. 452 persons were killed by wild animals and 1,505 by snakes : the totals for the previous year were 551 and 1,519. The number of deaths from wild animals was trivial, except in Ganjām and Vizagapatam, where the mortality was, as in the previous year, caused mostly by tigers ; the deaths from this cause being 212 in Ganjām and 100 in Vizagapatam. Snakes were most destructive in South Arcot (136 deaths), Tanjore (147 deaths), Trichinopoly (155 deaths), Salem (116 deaths) and Malabar (146 deaths). No other districts returned more than 100 deaths.

Rewards.

218. The rewards paid for the destruction of wild animals totalled Rs. 18,108. A sum of Rs. 16,130 was spent in clearing rank undergrowth from the neighbourhood of villages.

MISCELLANEOUS. (1916.)

[*Reports on the working of the Indian Arms and Explosives Acts, and of the Poisons Act, 1904; Return of sulphur licences in force during the year 1916.*]

Arms, explosives and sulphur.

219. The number of licences for arms was 46,814 as against 46,553 in 1915 and 47,962 in 1914. In accordance with the policy of Government, there was a pronounced fall in the number of licences to carry arms for sport, protection and display, and a corresponding increase in the number of licences for the destruction of wild animals. Licences belonging to the former class decreased by 132, while there was an increase of 541 in the latter class. The districts of Guntūr, Kurnool, Tanjore, Vizagapatam and Chittoor showed a decrease under the former class without a compensating rise under the latter. A decrease in the total number of muzzle-loading guns is set off by an increase in breech-loaders. Match-locks and flint-locks are rapidly becoming extinct. The number of rifles declined, but there was a regrettable increase of 108 in the number of licences for revolvers, an increase contributed largely by the districts of Anantapur and Trichinopoly. Licences under the Explosives Act fell from 12,885 in 1915 to 10,583. This fall is ascribed to the decrease of blasting operations in Coimbatore and Trichinopoly owing to heavy rains. There was a slight increase in Nellore due to the activity of mica mining. The steady reduction in the number of prosecutions under the Arms and Explosives Acts was continued, there being only 695 cases in 1916, of which 604 resulted in convictions. The number of prosecutions was greatest in the districts of Salem, Guntūr and Coimbatore. The number of licences for sulphur remained constant, but there was a decline in the quantity for which licences were issued, owing to the rise in the price of the commodity. The closure of mica mines in Salem district also contributed to the decline.

Poisons Act, 1904.

220. The number of licences under the Indian Poisons Act fell from 161 in 1915 to 151. There were 35 licences in Malabar, 15 in Gōdāvari and 12 in Tinnevelly. No other district had more than 10 licences. There was only one prosecution under the Act against ten in 1915. The number of cases of detected poisoning was very small. Human poisoning and cattle poisoning together give an average of less than 100 detected cases per annum for the whole Presidency. As usual, arsenic was the most common form of poison used.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

AGRICULTURE. (1916–17.)

[*Reports on the working of the Agricultural and Civil Veterinary Departments, Madras Presidency, for the year 1916–17 (G.Os. No. 3141, Revenue, dated 4th October 1917, and No. 3217, Revenue, dated 11th October 1917); Agricultural Statistics of British India.*]

General.

221. From the 1st November 1916 the Agricultural Department was removed from the control of the Board of Revenue, and placed under the direct control of Government in the Department of Land Revenue. At the beginning of August the "Pumping and Boring" section of the Department of Industries was transferred to form the basis of an Agricultural Engineering section of the Agricultural Department. Four out of the five coconut stations on the West Coast were opened during the year. Certain forest reserves near Bantanahal in the Alur taluk of the Bellary district were taken over by the Agricultural Department for the purpose of a sheep farm and a cotton seed farm. The Deputy Director of Agriculture for Live-Stock is engaged in looking for a suitable site in the Nellore district for a Government cattle farm. Out of 268 applicants for admission into the Agricultural College 42 were admitted. The foundation stone for the new reading-room and games pavilion was laid by His Excellency Lord Pentland on the 23rd November 1916 and the building has since been completed. Owing to the change in the curriculum there was no examination for the diploma during the year. In the usual examination at the end of the first course 23 out of 32 candidates were successful.

Research and experiment.

222. The season was marked by excessive rain in the north especially in the Ceded Districts, and a deficiency of the north-east monsoon in the south. In the central districts the season was good except for the cyclone in November 1916. The cotton crop was very poor both in quality and quantity all over the Ceded Districts. At Sirvel the Cuddapah-Kurnool canal breached as in the last two years and in consequence the crops were miserable. At Koilpatti the rainfall was short and unusual rain in February and March caught the cotton crop in full flower with the result that this year's crop of Tinnevelly cotton is much below the average both in quality and quantity. At Coimbatore the season was entirely favourable.

Sugarcane.

There was comparatively little sugarcane disease at Samalkota this year. At Anakāpalle red-rot was severe and of the seven varieties tested all suffered except one. Out of five varieties tested in irrigated dry lands at Palur, Red Mauritius gave the best yield of 36 tons of cane per acre. The

Paddy.

spacing experiment with paddy at Samalkota was discontinued. At Anakāpalle, Hoogli jute and local gogu (*hibiscus cannabinus*) were tried as a rotation with paddy. It was found that these crops exhausted the soil to the detriment of the succeeding paddy crops. At Samalkota experiments were in progress to test the value of hot weather cultivation for dry paddy. At Coimbatore a new experiment in stacking a green manure crop, covering it with earth and allowing it to decompose before applying it to the land, promises to give useful results. A gratifying feature of the work at the central farm is the steady increase in the average yield of paddy over the whole of the 40 acres of wet land. The records of the cost of cultivation of each field show a profit of at least Rs. 100 an acre in almost all cases and in some cases as much as Rs. 150. At Sirvel in spite of the bad season it was shown that superphosphate invariably increased

the yield of paddy. At Palur the effect of continuous green manuring with daincha has been a steady increase of yield. Fourteen different experiments on paddy manuring were in progress at Manganallur. Speaking generally, soluble phosphatic manures have given markedly increased yields especially when used in combination with either green manuring or ammonia salts. Much work was done with a view to improve the yield and quality of local cottons by selecting pure strains bred from single plants picked out from the local mixed crops. These strains are multiplied and tested *inter se* on the farms and the best finally picked for growing on a large enough scale to allow of sufficient cotton being obtained for spinning tests. It is only when these tests are favourable that a strain is finally selected and multiplied on seed farms for distribution to ryots. A new experiment was made in cultivating cholam in lines three and four feet apart. The rotation experiments with cereals and Bengal gram which have been in progress since 1906 will be discontinued and experiments with groundnut as the leguminous member of the rotation substituted. The comparison between fodder cholam and guinea-grass as a fodder crop was continued at Coimbatore. A successful introduction was Rhodes grass originally coming from South Africa. Three varieties of lucerne were obtained from America and tried at Hagari. One of these did very well. A beginning was made this year with single-plant selection of groundnut. The experiment on potatoes at Hagari was continued, but the rain in February practically drowned the crop. At Palur the tapioca was damaged by the cyclone. Henbane did very well at Koilpatti. Samples of the stems and leaves were valued and pronounced to be of fair quality though inferior to Egyptian henbane. The Coimbatore Dairy herd was increased and at the end of the year consisted of 39 cows, 5 heifers, 5 buffaloes and 72 calves. The year was unfortunate in that the herd suffered from two attacks of foot and mouth disease. The dairy continued to work most successfully and the sales went up considerably. The difficulty in securing tins for packing the butter was surmounted by the use of red cedar wood boxes made at one of the Trichinopoly cheroot factories. The dairy made a net profit of Rs. 326. The flock at Hagari was affected by the unusually wet season. The results of the breeding experiments will be tested on a larger scale on the new sheep farm and an attempt made to breed out pure types. Work on poultry at Coimbatore showed the difficulty in evolving a strain which will be an improvement on the mongrel country fowl in quality but which at the same time will prove as hardy.

Cotton. Dry grains. Fodder crops and grasses. Groundnut. Miscellaneous crops. Livestock.

223. The preliminaries for the Kistna delta soil survey were completed and out of 133 soil samples taken 80 have been analysed. Nearly 5,000 analyses were made, mainly of sugarcane. Investigations on paddy soils continued. A commencement was made with the microscopic examination of oil-cakes with a view to detect adulteration. A study of the effect of varying manurial treatment upon the composition of grain was also commenced.

Scientific research and experiments. Agricultural Chemistry.

224. The Economic Botanist and his staff continued their work on paddy at the Paddy Breeding Station. Work on the interaction of characters in paddy was continued and the more definite results obtained so far are being published. The most promising single-plant strains were again compared for yield and the same two head the list as last year. Several pure types of varying duration obtained from a cross between the local six months' variety and a strong growing four months' variety are showing good promise. A paddy survey of the Presidency has been in progress, the varieties being sent in by the district staff and grown at the Paddy Breeding Station. Some 65 varieties were so grown this year, but many of them proved to be mixtures. The pure types are gradually being sorted out, and pure line cultures started.

Economic Botany.

225. Spraying against the mango hopper was carried out in the Chittoor district. A serious pest in the shape of a climbing caterpillar appeared on paddy crops in the Chingleput, North Arcot and South Arcot districts in January and was studied in the field. Some work was also

Entomology.

done on the fresh water crab pest of Manganallur, but no certain remedy has yet been discovered. The cotton stem weevil also remains an unsolved problem.

Mycology.

226. A considerable amount of work was done on the fungus causing secondary leaf fall in hevea rubber. A root disease of coffee on the Nilgiris was investigated and successful preventive measures devised. Cultural and spraying operations against brown-blight on tea were most successful. One nursery which was about to be destroyed as being hopelessly diseased was saved and 77,000 seedlings planted out from it.

Sugarcane Breeding Station

227. The work continued on the same lines as in previous years, but with increasing success. The number of cane varieties which flowered was 96 as against 71 last year. From these some 4,000 crosses were obtained and 99,000 seedlings raised. These crosses are between thick and thin canes made with a view to obtaining canes combining the hardiness of the thin North Indian cane with something of the high sugar-yielding qualities of the thick South Indian cane. Work was done during the year on the classification of Indian canes, 33 varieties of local canes growing on the farm being exhaustively studied.

Aid to the Public.

Operations against disease.

228. By the middle of June 1917, the work of general examination of palmyra trees for disease had been finished in Kistna and in the central delta of Gōdāvari. In the eastern delta and uplands of Gōdāvari the work was completed in 172 villages. 879,134 trees were examined in the two districts. Statistics show that the system is working successfully and the incidence of the disease is being steadily reduced. One noteworthy feature in the operation was that the ryots have borne the entire cost of cutting and burning the trees since July 1916. The work of spraying areca palms against mahali disease was transferred from the Government Mycologist to the district staff. Nearly 43,000 palms were treated and the operations were a thorough success. The steeping of seed in a solution of copper sulphate as a preventive against smut was found effective in the case of Italian millet and cumbu as well as cholam and 21,790 acres were sown with treated seed. Over 79,000 sugarcane setts were sold for seed from the Samalkota and Anakāpalle farms. Exotic canes are spreading rapidly round Anakāpalle under the stimulus of Messrs. Parry & Co. who have now opened a factory there. A beginning was made in improving the local methods of cane cultivation near Madanapalle and Pakala in the Chittoor district. There has been a considerable development of sugarcane cultivation in the Palghat taluk of the Malabar district where Messrs. Parry & Co. have put up a milling and jaggery-making plant. The introduction of the hard Red Mauritius cane has greatly widened the scope of cane cultivation in South Kanara as this cane is comparatively immune from the attacks of wild animals. It is hoped to introduce jaggery-making by the actual growers with the help of the Co-operative Department. Efforts to encourage the growing of good strains of cotton were continued successfully. 87,086 lb. of seed raised on the seed farms were sold to ryots at a premium for sowing in October-November 1916 and 26,840 lb. issued to seed farms. Last year 87,096 lb. of seed were sown and about 40 per cent of the resulting crop from this seed was sold by ryots on co-operative lines. A conservative estimate would show that some 56,000 acres of cotton were sown with farm seed during 1916. The system of joint sales and ginning was expanded, and 362 ryots in 71 villages combined for this purpose. In six of these villages regular seed unions were formed during the year. The aim of the department is to form a network of these seed unions over the Tinnevelly cotton tract, so that the bulk of the seed annually sown in the 600,000 acres of cotton may be supplied by these unions. The fight against pulichai cotton has been successfully continued. Fortunately the department has been able to produce a variety of long-stapled cotton which is not only superior in quality, but actually gives a better yield per acre. The chief danger has been the shortage of seed of this variety, but the combined efforts of the chief firms co-operating with the Agricultural and Revenue departments succeeded in checking the

Crops.

raising of pulichai, which the firms have bound themselves not to buy. Pulichai has thus been largely stamped out but it still exists as an impurity in the general crop over a wide area. The demand for the surplus paddy seed of the farms continued and altogether 68,251 lb. of seed were sold. Economic planting has proved signally successful in the fertile and well-drained lands along the Bhavani valley and has shown such a marked increase of yield that it is being rapidly adopted by the ryots. The use of superphosphate as a manure for paddy is becoming popular in the south. Altogether 166,457 lb. of green manure seed were sold as compared with 170,515 lb. last year. The decrease was due to the failure of the supply of daincha seed from Bengal, the crop there having been destroyed by a cyclone. The researches of the special Indigo Chemist have shown the feasibility of considerable improvements in indigo manufacture and the possibilities are being further investigated. The demand for the light " Monsoon " iron plough continues in spite of the fact that its cost has risen ; during the year some 50 of these ploughs were sold and others let out on hire. . One hundred and eleven sets of drills were sold against 83 last year and 15 sets are known to have been made by ryots for themselves, which is a new departure.

Agricultural Associations.

229. Considerable progress has been made amongst the various societies which exist for the extension of scientific methods of agriculture. Much good work was done by co-operative societies which purchase seeds and manures for the local ryots. There is a healthy tendency to eliminate the old district associations and substitute village associations or agricultural co-operative societies.

Agricultural Engineering.

230. The new Agricultural Engineering section of the department was organized on 1st August 1916 when the Pumping and Boring establishment of the Department of Industries was taken over. During the year 6 pumping and 20 minor industrial plants were erected for private parties and 23 were in course of erection at the end of the year. The difficulty in getting new machinery during the war and the high price of liquid fuel which is more than double that of three years ago, militated against any large expansion of this branch of work. These factors account for a decline in applications for investigation and advice which totalled 125 as against 136 last year. The number of installations paying the inspection fee was 234, 111 being pumping plants and the rest industrial. Twelve pumping sets owned by the department were let on hire to ryots during the year and 32 hand-boring sets and two power drills were in use. The total depth bored came to 22,323 feet as against 24,750 feet last year. A strong sub-artesian spring was tapped in the Gudivada taluk of Kistna district giving a supply of 500 gallons per minute at 7½ feet below the ground level. Work is in progress on the preparation of maps giving the contours of sub-soil water levels, to assist the department in giving advice to ryots. Two sugarcane-crushing and jaggery-making plants were in use during the year, one in the Coimbatore district, and the other near Hospet in the Bellary district, and as a result of this demonstration two similar sets have been erected for private parties. These plants are an economic success provided that sufficient cane can be obtained within a small distance. Further expansion may be possible after the war by laying down light tramways to bring in the cane. Work to the value of Rs. 13,666 was carried out at the workshops attached to the Agricultural Engineering section.

Pumping.

Boring.

Finance.

231. The gross expenditure of the department was Rs. 7,15,518 while the receipts amounted to Rs. 1,35,903. This includes the cost of the pumping and boring sections.

Civil Veterinary Department.

232. The number of students in the Veterinary College at the end of 1916 was 76. Fifteen out of eighteen candidates passed the final examination. Four men entered the newly formed class for compounders and two passed.

Madras Veterinary College.

Hospitals and Dispensaries.

233. During the year a new hospital was opened at Mangalore and a dispensary at Madanapalle. Cuddapah is now the only district which has no veterinary institution of any kind. The Court of Wards is arranging to open hospitals in the estates of Uttumalai, Kangundi and Vallūrū. The majority of the hospitals showed a satisfactory increase in attendance and the improvement was marked at Rajahmundry, Berhampur and Tinnevelly. The fall in admissions at Saidapet is ascribed to the introduction of admission fees.

Diseases.

234. The number of deaths recorded increased under almost every head. There was a considerable expansion of rinderpest, from which Guntūr district suffered most severely. Over 100,000 cattle were inoculated against this disease and additional men were posted to the districts of Guntūr, Kistna and Gōdāvari to combat it. Hæmorrhagic septicæmia was also on the increase and there was a notewothy spread of black-quarter. Anthrax increased slightly and the number of cases of foot-and-mouth disease was more than double last year's figure.

Breeding Operations.

235. There were nine stud bulls on 1st April 1916 ; of these one was sold and one destroyed. No stallions are now maintained as the breeding of Arabs has been discontinued and it has not been found possible to secure suitable country-bred stallions.

Fairs and shows.

236. The usual shows were held at Madura and Tiruppūr. No show was held at Ongole as it has been decided to hold the show biennially. The Cattle Disease Act was enforced at all important cattle fairs.

WEATHER AND CROPS.

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917.)

[*Season and Crop Report for fasli 1326 ; Agricultural Statistics of India ; and Area and Yield of certain principal Crops in India.*]

Rainfall.

237. The south-west monsoon commenced earlier than usual about the beginning of June with good showers in the Circars, Deccan, the Central group of districts, the West Coast and the Hills. The rainfall in July and August was generally above the average throughout the Presidency. In Ganjām, the rains were inadequate along the coast and consequently transplantation was delayed. The inadequacy of rainfall in the uplands of Gōdāvari in August and September necessitated the grant of larger remissions than in the previous year. The rainfall in September was below the average in the Circars except Gōdāvari, in the Carnatic, in the Central group of districts except North Arcot, and in Tanjore and Tinnevelly. The total rainfall during the south-west monsoon was above the average in all the districts except Ganjām and South Arcot. The heavy rainfall during the monsoon in the Kistna district brought down floods in some of the rivers and necessitated the grant of remissions on a large scale in four taluks. The season was, on the whole, favourable to agricultural operations except in Cuddapah for dry crops and in Tinnevelly for wet crops. The area cultivated with dry first crop up to the end of September was above the average in all the districts except Gōdāvari, Kurnool and Chittoor. The deficiency was 11 per cent in Gōdāvari, 4 per cent in Kurnool and 5 per cent in Chittoor. The area under wet first crop showed a decrease as compared with the average in Guntūr and Malabar, the percentages of decrease being 3 and 6, respectively. The north-east monsoon commenced as usual in the month of October with good showers throughout the Presidency. The rainfall in this month was above the average in all the districts except Trichinopoly, the South and the Nilgiris. There was a diminution in rainfall in the first week of November, but prospects improved in the second week and the improvement was maintained throughout the month with particularly good showers towards the close of the month in several districts. The rainfall in November was above the average in the Circars except Gōdāvari, in the Deccan, in the Carnatic except Nellore and in the Central group of districts except Salem and Trichinopoly and in South Kanara.

The heavy rains in this month, followed by a cyclone in the tracts bordering on the trijunction of Chingleput, South Arcot and North Arcot districts and the abnormal fall in Salem, breached a number of irrigation sources and caused considerable damage to crops especially in South Arcot. The excessive rains in Kistna, Guntūr and Kurnool also affected the standing crops. Submersion of crops by floods occurred in Vizagapatam and in Kistna. Season remissions had to be granted in Vizagapatam, Guntūr, Bellary and Salem. The rainfall in this monsoon was above the average in all the districts except Nellore, Trichinopoly, the South and the Hills. On the whole, the season was favourable and led to an increase in cultivation in many of the districts. But remission had to be granted in Tanjore owing to deficiency of water-supply. The dry weather rains were above the average in the majority of districts; but the hot weather rains were a comparative failure.

Crops.

238. The total cropped area of 1916–17 was 39,052,000 acres against a normal area of 38,166,000 acres. The area under paddy was $11\frac{1}{2}$ million acres and exceeded last year's area by 360,000 acres. There was a marked increase in Anantapur (109,183 acres) due to good rains while a similar increase in Kistna was due to the extension of cultivation. $4\frac{3}{4}$ million acres were planted with cholam as against $5\frac{1}{2}$ million acres last year. The chief decrease was in the Deccan (569,798) and is ascribed to the preference given to groundnut and indigo. Untimely rains accounted for smaller decreases in Coimbatore and Kistna. The area under cumbu also declined from 3·6 to 3·4 million acres, the chief cause being the preference given to the cultivation of groundnut and irrigated crops. Ragi fell from 2·5 to 2·4 million acres for similar reasons and there was a 5 per cent fall in the area under gingelly. The area under groundnut increased by half a million acres to $1\frac{3}{4}$ millions. The increase was chiefly in the Deccan, Coimbatore and Ramnad and is explained by the relatively high prices which prevailed at the time of sowing. Sugarcane rose from 94,623 to 114,371 acres owing to the curtailment of foreign supplies and consequent high prices. The general depression of trade and difficulties of transport account for the shortage of the area under cotton, which was 2·17 million acres, or 12 per cent below the normal. At the same time there was an increase in many districts as compared with last year's figures, owing to the difficulty felt by the Bombay mills in obtaining sufficient supplies of American long staples and the consequent demand for Madras long-stapled cotton. The area under indigo was 460,000 acres, which is twice the area sown with indigo in 1915–16 and nearly six times that of 1914–15. This is due to the shortage of synthetic dyes. There were slight increases in the areas cultivated with tobacco and castors.

HORTICULTURE. (1916–17.)

[*G.Os. No. 2037, Revenue, dated 7th July 1917; No. 3197, Revenue, dated 9th October 1917; Report of the Agri-Horticultural Society of Madras for 1916.*]

Government Botanic Gardens and Parks, the Nilgiris.

239. Great difficulty was experienced throughout the year in keeping the Botanic Gardens in good order owing to the difficulty in procuring labour, in spite of the fact that the wages were increased. Nevertheless the conservatory was always full of flowering plants and there was a fine show of orchids, of which 44 species flowered during the year. Two crops of potatoes were grown but both were poor. Most of the seed obtained is being reserved for planting. At the instance of the Honourable the Surgeon-General an effort has been made to revive the cultivation of drug plants such as *digitalis*, *atropa belladonna* and *hyoscyamus niger* (henbane). A large consignment of fruit trees was imported from South Australia and many varieties of orchids were purchased locally. The work of improving the turf in Sim's Park was continued. The turf was top-dressed with the silt obtained when cleaning the lake, which latter undertaking occupied the attention of the whole garden staff for over two months. The orchard has been greatly extended by opening out a new

piece of land and planting it with trees obtained from Australia. The trees arrived in October and were immediately planted in pits. As was to be expected some of the trees have since died but the remainder have grown well. Some of the apple, peach and plum trees imported in 1912 are doing well in spite of the ravages of a fungoid disease. In the Burliar experimental garden the mangosteen crop was a record one and Rs. 543 were realized by the sales. The cocoa trees also produced good crops of fruit and the beans were sold to the East India Chocolate Factory. This is believed to be the first time that cocoa and chocolate have been grown and manufactured in India. The Para rubber trees in the Kallar experimental garden were tapped when weather conditions were favourable and at the close of the year 353 lb. of rubber valued at approximately Rs. 500 were available for sale. But orders have been received to discontinue rubber experiments. The coffee plants at Benhope have grown better than in previous years. This is no doubt due to some of the shade trees being cut down to admit more light and to prevent drip from the trees. The receipts in all were Rs. 6,389 and the expenditure was Rs. 28,376. The proposal to establish a seed farm for potatoes on the Nilgiris was accepted by Government and after various sites have been inspected, it was decided to locate the farm in the village of Ketti, Coonoor taluk. This site not being available immediately, Government have since decided to open the station in Nanjanadu village in the Ootacamund taluk.

The Agri-Horticultural Society, Madras. (1916.)

240. The income of the Society from all sources, excluding the Government grant, amounted to Rs. 12,590 or Rs. 1,491 less than in 1915. The Government grant amounted to Rs. 5,800. The fall in subscriptions is attributed to the effect of the war. The expenditure of the Society was Rs. 20,228 and the year closed with a balance of Rs. 1,662. The Seventy-seventh Annual Flower Show was held on the 25th February 1917; the exhibits were good but the financial result was a loss. A considerable sum was spent during the year on constructions and repairs.

Government Cinchona Plantations.

241. Generally speaking the season was a favourable one for the growth of cinchona trees. The total area under cultivation at the beginning of the year was 1,679·99 acres, consisting of 1,002·44 acres under cinchona and 677·55 acres under fuel trees. The only addition to the estates was an area of 4·92 acres, opened as an experiment at Dodabetta with *cinchona officinalis* plants. At Naduvattam, 138 acres of forest land were cleared and pitted. At Hooker 62 acres of forest land were felled to receive cinchona plants in 1917–18. 12,071 lb. of bark were received from the Dodabetta estate and 46,991 lb. from Naduvattam.

Quinine Factory:

242. The total amount of bark worked up in the factory was 1,184,000 lb., consisting of 295,800 lb. of *cinchona ledgeriana*, 115,924 lb. of locally purchased *cinchona officinalis* and hybrids and 772,276 lb. of *cinchona officinalis* from Dodabetta plantation. The total quantity of quinine sulphate obtained from the bark was 52,513 lb. which surpasses by 60 per cent the highest previous output of the factory. The percentage of extraction for the year is 92·8, which shows a marked increase compared with previous years. 1,775 lb. of quinine hydrochloride and 2,191 lb. of quinine hydrochloride acidum were manufactured during the year. The department supplied to the army over 10,000 lb. of quinine sulphate, mainly in the form of five-grain tablets, 1,000 lb. of quinine hydrochloride and 2,000 lb. of quinine hydrochloride acidum (for injections). The total factory expenditure was Rs. 75,298. The total cost of manufacture of quinine worked out at Rs. 8–10–0 per pound against Rs. 9-6-6 per pound last year whereas the average wholesale market rate for the year was Rs. 26-8-0 per pound. In all 50,320 lb. of factory products were sold, made up of 39,973 lb. of quinine sulphate, 1,430 lb. of quinine hydrochloride, 2,050 lb. of quinine hydrochloride acidum, 5,380 lb. of quinine sulphate tablets, 1,487 lb. of cinchona febrifuge. The Medical depots received the bulk of the quinine hydrochloride and quinine hydrochloride acidum. The sales through post offices in the Madras Presidency were 3,085½ lb. representing 21,598 packets, an increase of 373½ lb. on the previous year's sales.

Finance.

Sales.

FISHERIES. (1916–17.)

General.

243. Sir Frederick Nicholson, K.C.I.E., continued to be Honorary Director of the department. In the course of the year the cannery and soap-works were visited by His Excellency the Governor and by the members of the Indian Industrial Commission. The main operations during the year were :—(1) curing, smoking and pickling fish and the manufacture of fish-oils and guano at Tanur ; (2) canning at Chaliyam with experiments in solar heating ; (3) soap-making ; (4) fresh water fish-farms at Sunkesula and Ippur, including larvicide breeding ; (5) re-stocking and conservancy of waters in the plains and trout culture in the Nilgiris ; (6) the Tuticorin marine fish-farm ; (7) edible oyster farm at Pulicat ; (8) pearl oyster farm at Pāmban ; (9) *bêche-de-mer* cultivation ; (10) chank work ; and (11) experimental deep-sea fishing.

The West Coast stations.

244. The experimental stations at Tanur and Beypore had a better year than in 1915–16, but the season was far from favourable. Only small and lean sardines and unusually small mackerel were obtainable and large fish were scarce. The oil and guano manufactured at the yard continued to be of first class quality though small in quantity and there is now little difference between the skimmed and pressed oil. The guano gave a high percentage of nitrogen. The experiments in mackerel pickled either plain with salt or with condiments are being successfully developed. The cannery also did better than in the previous year and over half a lakh of tins of various sizes were packed. The Henderson method of freezing fish was successfully operated. The two Ratnagiri boats bought in the previous year brought in considerable quantities of fish.

Piscicultural work.

245. As regards inland fresh water fisheries, the Sunkesula fish-farms were extended by what is known as the Pudūr scheme. Work progressed at the Hilsa hatchery on the Coleroon. A good deal of useful work was done in stocking and restocking many of the principal tanks in the Presidency. The Ippur fish-farm in the Nellore district was started mainly for larvicides and for the breeding of gourami and other valuable fish. Other operations were the acclimatization of tench, breeding operations at the Old Powder Factory, Madras, anti-malarial work in the Nallamalais and elsewhere and the continuance of trout operations in the Nilgiris. A considerable area was brought under the restrictive operation of section 6 of the Fisheries Act. The late Mr. H. C. Wilson who was in charge of piscicultural work also visited Java and successfully brought back a valuable consignment of gourami. Chank work resulted in a larger profit to the department than has ever been attained before from chanks. Nothing was realized from pearls as there was not a pearl oyster to be found. The Tuticorin marine fish-farm and the *bêche-de-mer* industry both yielded profits, and something was made by the sale of biological specimens to the colleges. The Pulicat oyster farm worked at a small loss, being more of a research station than a commercial enterprise. The estimates for the proposed pearl oyster farm off Pāmban are under consideration by Government. The initial cost is estimated at over half a lakh of rupees, but there is a probability of considerable profit.

Marine work.

Soap.

246. Marked progress was made by the soap manufactures. During the year 12 tons of fish-oil soaps, 32 tons of "Wash-well" and 12 tons of "Vegetol" soap were turned out besides a small quantity of milled toilet soap. More was not possible as the manager was occupied in obtaining and fitting up the new plant, experimenting, buying raw material, training the staff and getting business together. The various qualities of soap manufactured by the department have a growing market, and large orders have been received from the Military and Red Cross authorities. As the glycerine recovery plant ordered from England has not arrived, glycerine could only be recovered on a small scale by make-shift arrangements, which are, however, under development.

Social work.

247. Social work forms part of the activities of the department, which has made great efforts to spread the co-operative movement among the fisherfolk. Two societies were in existence on the West Coast at the

beginning of the year and four more were started during the year, besides preparatory work for other societies, four of which have since materialized. The school attached to the Tanur yard had 30 boys on its roll, and earned a grant of Rs. 116 from Government. It is run by the yard staff, who also teach carpentry and smith work.

FORESTS.

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917.)

[*Annual Administration Report of the Forest Department of the Madras Presidency for the year ending 30th June 1917*; *Statistics of British India, Part IV (b)—Finance and Revenue.*]

Area.

248. Some 8 square miles were constituted reserved forests and in pursuance of the policy recommended by the Forest Committee 44 square miles were disafforested during the year, the greater part of the latter area being in the districts of Bellary, the Nilgiris and Cuddapah. The total area of reserved forest was 18,810 square miles at the close of the year, a net decrease of 35 square miles on last year's figure. The area of reserved lands also fell from 734 to 725 square miles. In the Parlākimedi Maliahs a block of about 13 square miles was added to reserved lands during the year.

Forest settlement.

249. Out of a total area of 493 square miles which awaited settlement at the close of the year, the Northern Circle alone accounts for 422 square miles. Three large blocks covering an area of 418 square miles were awaiting settlement in the Gōdāvari district. The settlement papers in respect of two large blocks, viz., Nugur (246·61 square miles) and Peddamedisileru (96·48 square miles) are still undergoing revision at the hands of the local officers. It is reported that the final notification in respect of the remaining block, the Coringa extension reserve (75 square miles), will be ready for publication during 1917–18. The Chokkapad block in the Ganjām district (area 64·69 square miles) was notified under section 16 after the close of the year. The appointment of a Special Forest Settlement Officer for the Southern Circle still awaits the orders of Government. The forest settlement work is practically complete in the Central and the Western Circles.

Demarcation.

250. Of the 35,370 miles of forest boundaries 1,887 miles do not require artificial demarcation. The total length of artificially marked boundaries was 33,041 miles, of which 123 miles were demarcated for the first time. 442 miles remained still to be demarcated at the close of the year, principally, as in the previous year, in the districts of Kollegal and Madura. The length of old boundaries repaired during the year was 18,808 miles against 17,644 miles in the previous year; of this length 12,259 miles were cleared by subordinates free of cost. The average cost per mile of fresh demarcation and of repairs rose from Rs. 36–5–3 and Rs. 2–11–7 to Rs. 37–1–8 and Rs. 3–2–9.

Surveys.

251. The Survey of India continued its operations in the Nellore district and surveyed about 115 square miles on the 4-inch scale and about 65 square miles on the 2-inch scale. A special surveyor deputed by the Survey of India completed the survey of some of the teak plantations in South Malabar and prepared maps for them. Miscellaneous work, such as the survey of coupes, the alignment of roads and fire lines, the verification of boundaries and preparation of coupe and working-plan maps, was done by departmental surveyors.

Working-plans.

252. Working-plans for an area of 494 square miles were sanctioned during the year and plans for 1,805 square miles were under preparation by District Forest Officers. The most important working-plans now under preparation are those for the sāl forests of Ganjām, the teak plantations of Nilambūr and the Mount Stuart forest in the Anamalais. Other working-plans sanctioned during the year were the Hosūr sandalwood working-

plan in North Salem and the revised working-plan for the fuel forests of Madura. There are still about 7,000 square miles of forests for which no working-plans have been prepared and many of the existing plans are either defective and require revision or are nearing the end of the period for which they were framed. An additional working-plans party has been sanctioned since the close of the year for the Southern Circle. Satisfactory progress in this most important branch of work cannot be expected at present, owing to the absence on military duty of many officers of the department.

Communications and Buildings.

253. Expenditure on buildings was restricted to essential requirements and fell from Rs. 1·32 lakhs to Rs. 1·02 lakhs. Expenditure on roads and bridges, being frequently remunerative and even more vital for the successful working of the department, rose from Rs. 1·08 lakhs to Rs. 1·62 lakhs. The chief works were under the head of buildings, quarters and offices for subordinates ; and under roads and bridges an extension of the Mount Stuart tramway for ten furlongs. The working of this tramway for the year showed a profit of Rs. 11,192 as compared with Rs. 1,441 in the previous year. In the Nellore district temporary tram lines were laid for the transport of fuel from the casuarina plantations and the Srīharikōta reserve. 3,765 tons of fuel were transported from Srīharikōta and 1,045 from the casuarina topes, a considerable increase over the figures of last year, which were 1,518 and 927 tons respectively. Satisfactory progress was made by the Forest Engineer on the important Alangayam-Komattiyur Ghat road. The first section of five miles was completed and work on the other two sections well advanced. Rs. 47,457 were spent on this work. The alignment of the Nadanur-Amerdi road was selected and the Forest Engineer completed his field work in connexion with the Tekkadi tram trace. In all 403 miles of forest roads and bridle-paths were constructed during the year.

Protection.

Offences.

254. The total number of offences was 28,087 or 2,798 less than in the preceding year and 3,647 less than the average for the three preceding years. This satisfactory decrease of crime is attributed to better supervision, to the satisfactory working of the patrol system and to the extension of forest panchayats and the kancha system. Offences appreciably decreased in the districts of Kurnool, Bellary, Nellore, North Arcot, South Arcot, Salem and Madura. The Southern Circle contributed 44 per cent and the Central Circle 33 per cent of the total number. Crime was heaviest in the districts of Guntūr, North Vellore, South Arcot, North Salem, Trichinopoly and Madura, which together return 40 per cent of the total offences in the Presidency. Of all reported cases the percentages that were taken to court, compounded and undetected were 22·13, 71·08 and 6·79, respectively, against 24·34, 67·15 and 8·51 in the previous year. Of the 7,438 cases disposed of by magistrates, nearly 94 per cent ended in conviction against 92·8 per cent last year. Rewards amounting to Rs. 772 were granted to informers and forest subordinates against Rs. 903 in the previous year.

Fire.

255. The season was favourable for protection against fires and there was a decrease in the number of offences and in the area burnt. Instances of deliberate incendiarism occurred in the Anantapur and Cuddapah districts, and in some cases reserves were closed to grazing, grazing fees enhanced and the privilege of free removal of grass withdrawn. The area over which special protection was attempted was 7,213 square miles, of which 861 square miles were burnt, a percentage of failure of 11·9 as compared with 17 of last year. The cost of successful protection per square mile was Rs. 18-4-8 against Rs. 20-12-7 in the previous year. The forest village system in the Javadis, under which the villagers are granted various privileges, including free grazing, in return for the protection of the forests, was further developed and worked well.

Cattle.

256. In all new working-plans special attention is being paid to the question of grazing, with a view to minimizing hardship to the ryots, while improving the grazing and protecting the forests from the damage done by

overgrazing. The kancha system in Nellore continued to develop, and a special Deputy Collector was deputed to popularize the system and encourage its growth. Attempts are being made to introduce the system into the adjacent district of Chingleput. When statistics of cattle and the " grazeable " areas are carefully examined, it is usually found that the area available for each head of cattle is quite insufficient to maintain them in condition. The forest panchayats, the kanchas of Nellore and the forest village system will all relieve the situation when they are practicable and a gradual enhancement of the present nominal grazing fees coupled with more effective supervision should, in time, reduce the excessive number of useless animals now kept by the villagers. The fees charged by Government are considerably lower than those charged by private individuals for grazing. In the meantime efforts are being made to diminish the friction between the department and the people, as will be seen from the fact that the number of cattle impounded during the year showed a decrease of 32,641 compared with the previous year. The total number of animals licensed to graze on payment fell from 3,875,000 to 2,704,959. The main cause of the decrease was the transfer of a number of reserves to panchayat management.

Natural causes.

257. Spike continued its attacks upon sandal in North Salem, Trichinopoly, Kollegal and North Coimbatore. The cause of the disease is being investigated. Good progress has been made in the eradication of lantana in North Malabar and Coimbatore. Loranthus in the *Hardwickia binata* forests of the Yerramalais in West Kurnool division is reported to be a serious and increasing pest and no measures have yet been devised to combat this evil, the lopping of branches affording only a temporary relief. The cyclone of November last uprooted a large number of trees in the reserves of South Arcot and great damage was done to the forest of South and West Vellore where sandal and other trees were uprooted by thousands.

Sylviculture.

258. Owing to a favourable season natural reproduction was satisfactory, especially in the case of sāl in Ganjām and *Hardwickia binata* in Kurnool, Bellary and Guntūr. In Cuddapah red sanders coppiced well, and reproduction in Chittoor was satisfactory. Sandal reproduction was good throughout the chief sandalwood areas. Favoured by bamboo seeding, hopea reproduction in South Kanara was good. In Kurnool, the teak plantations established for the purpose of providing labour for the Chenchus were maintained and an additional area of 45 acres was planted. Small additions were made to the teak plantations in South Malabar. Cultural operations were carried on over a total area of 11,093 acres, compared with 2,376 acres in the previous year, and regular planting was done in one hundred acres at a cost of Rs. 5,411. The Board is considering the question whether more planting should not be undertaken by the department, care being taken to avoid the waste of money which occurred in the past by concentrating effort on favourable localities and insisting on a proper continuity of policy. Operations for the improvement of growing stock consisted of improvement fellings, thinnings, fencing, creeper-cutting and the removal of inferior species, dead and dying trees, parasites and noxious growth and weeds.

Exploitation.

Major produce.

259. The various methods of exploitation of major produce were, clear or regeneration fellings, thinnings, selection fellings, improvement fellings and coppice fellings. Clear or regeneration fellings were carried out in Ganjām, Kurnool West, South Arcot, Trichinopoly and South Malabar. Thinnings were carried out in Gōdāvari Lower only and selection fellings were made, as usual, in timber coupes or where it was found necessary to eliminate dead and unsound trees. Improvement and coppice fellings were undertaken principally in fuel coupes and in a few timber coupes and bamboo areas. Unregulated fellings under the permit system were confined to Rampa in Lower Gōdāvari and to some unreserved lands. Minor produce was generally leased out. Bamboos were removed on permits in six divisions in the Western Circle to meet the local demand. The manufacture of catechu in North Mangalore and the collection of miscellaneous produce in Kurnool West, in parts of Nellore, the Nilgiris and

Minor produce.

South Coimbatore were carried out by departmental agency. In Kurnool the Chenchus were employed on the collection of minor forest produce and bamboos from areas not leased out. In Ganjām the enjoyment of fruit trees was generally left to the Khonds. The right to collect cassia barks was leased out in most districts. In the Central and Southern Circles *cassia fistula* (rela bark) was leased out for the first time in all districts. Ryots were allowed to cut and remove grass from reserves in all districts, except in parts of North Cuddapah, Anantapur and Nellore, where the privilege was withdrawn because the villagers had failed to assist in putting out fires, and in those districts where there was no demand. In Bellary 860 tons of hay were cut on contract, against 450 tons in the previous year. The Military Department held leases of areas in Bellary, Anantapur, West Cuddapah and North Vellore at Rs. 2 per ton of hay removed. The revenue from grazing and fodder grass, Rs. 7,03,869, was higher than in the previous year by Rs. 17,298. There was a large increase in North Coimbatore, where the fees were doubled as a punitive measure for incendiarism.

Output.

260. The output of timber was 4·3 million cubic feet and 21 million cubic feet of fuel were removed from the forests. Bamboos to the value of Rs. 3·43 lakhs were cut and the value of the minor produce (including grazing) was Rs. 18·42 lakhs. The quantity of timber and fuel and the value of bamboos extracted by departmental agency decreased, owing to the extension of contract work. The quantity of fuel and the value of bamboos removed by purchasers increased in all the circles. The value of minor produce extracted by departmental agency decreased in the Western and Northern Circles, but the value of removals by purchasers increased in all the circles except the Southern. In the Central Circle the rise was due to the sale of *cassia fistula* bark and to the better prices obtained for tangedu leases in general. The estimated value of forest produce removed by right-holders was Rs. 55,684 against Rs. 41,872, and of produce granted free and at reduced rates, Rs. 47,766 against Rs. 22,240. The increase in the value of free grants was due to the large applications for rebuilding houses and huts damaged or destroyed by the floods in Kistna and Kurnool in October and November 1916 and by the severe cyclone of November 1916 in South Arcot district.

Finance.

261. The gross revenue was Rs. 47·79 lakhs and the expenditure Rs. 27·84 lakhs, leaving a net surplus of Rs. 19·95 lakhs, the highest yet recorded. This surplus was distributed over all the circles and was higher than that of the previous year by Rs. 6·64 lakhs. This result is partly due to rigid economy and the postponement of necessary expenditure owing to the war and also to an increase in the revenue from sandalwood, to the leases of *cassia auriculata* and *cassia fistula* which had not been sold for five years and also to the sale of reserved forests which had been given up. The expenditure on Conservancy and Works increased from Rs. 10·98 lakhs to Rs. 11·89 lakhs and that on Establishments by Rs. ·85 lakh. As soon as favourable conditions return, a much larger expenditure will be necessary under both these heads.

Research and experiments.

262. Besides the work on sandalwood pests mentioned above, experiments were carried out to ascertain the conditions best suited for the natural regeneration of red sanders. Considerable research work was done with reference to natural dyes, tanning barks and paper-making materials. Under the latter head, proposals are under consideration for the establishment of a bamboo pulp factory on the West Coast by a private firm.

General.

263. All the forests of the Presidency have now been classified in accordance with the recommendations of the Forest Committee. There has been a satisfactory increase in the number of panchayats, which now number 290 as compared with 147 last year. The area under management is now about 479 square miles of reserved forests and unreserved lands which have been declared reserved lands for purposes of panchayat management, compared with 210 square miles last year. The panchayats are reported to have worked well on the whole. Six panchayats are reported to have been dissolved and the area under their management

resumed on account of misconduct. A special officer has been appointed to look after the Chenchus of Kurnool, for whom work has hitherto been found in the teak plantations which are not capable of much further extension. Mr. A. W. Lushington, C.I.E., retired Conservator of Forests, has been employed as Special Assistant to the Forest Commissioner to investigate the possibility of more commercial exploitation of the forests. It is clear that as soon as conditions permit much more direct exploitation will have to be undertaken by Government. Private firms are not willing to invest large sums of money in tramways, sawmills and other plant, and without these the more remote forests will remain unexploited. Little, however, can be attempted till the staff of the department has been strengthened. A new departure was made in the transfer of the revenue administration of the hill villages in the Javadis to the Forest Department.

Forest College, Coimbatore.

264. The Forest College, Coimbatore, continued to work satisfactorily. Out of the 29 students who appeared for the final examination, 19 obtained the higher standard certificates and 8 the lower standard and only 1 failed to qualify for any certificate. The 1916–18 division started in August 1916 with 34 students, of whom seven were found to be unfit for training.

MINES. (1916.)

[*G.O. No. 1193, Revenue, dated 24th April 1917; Statistics of British India, Part I, Industrial—Mines.*]

Output.

265. During the year mining was carried on only in the five districts of Vizagapatam, Nellore, Anantapur, Kurnool and Salem. There was a slight decrease in the output of gold in Anantapur; out of the total quantity of 66,540 tons of quartz raised from the mines during the year, 22,371 troy oz. of fine gold and 1,362 troy oz. of fine silver were extracted. There was a considerable increase in the output of manganese in Vizagapatam, of magnesite in Salem, and of mica in Nellore. 817 tons of mica were raised principally from the mines in Nellore district as against 195 tons in 1915. Manganese increased from 352 tons to 2,755 tons and magnesite from 7,450 tons to 13,254 tons. In Vizagapatam five mines were reopened. There was a little mining of steatite in Kurnool.

General condition of the employees.

266. The general health of the employees was good. There were no epidemics during the year except in Anantapur where there were six cases of cholera, eleven cases of small-pox, and an imported case of plague. In Vizagapatam the average daily number of labourers employed during the year was 291 against 39 during the previous year. The rates of wages were the same as in the previous year. In Nellore labour was extensively supplied by the members of the Kalichedu criminal settlement. There was no general change in wages of mine workers. Neither women nor children were employed below ground in Anantapur, but in other districts women and sometimes children worked underground. In Nellore two persons were seriously injured and in Salem one. In Anantapur four persons were accidentally killed and four were seriously injured. There were no accidents in Vizagapatam and Kurnool.

MANUFACTURES. (1916–17.)

[*G.Os. No. 708, Home (Education), dated 29th May 1917, No. 642, Home (Education), dated 15th May 1917, and No. 1470, Home (Judicial), dated 17th July 1917; Statistics of British India, Part I, Industrial—Factories.*]

General.

267. The chief manufacture in the Presidency is the spinning and weaving industry. The number of cotton spinning and weaving mills

Spinning and weaving.

in the Presidency, exclusive of four in the French Settlements and one in Cochin, was twelve, with over 400,000 spindles at work. Weaving is mostly carried on as a cottage industry, but the Buckingham Mills at Madras work a considerable number of looms and there are two other factories in the Presidency which have power-looms. The hand-loom industry is very extensive and absorbs the greater portion of the yarn produced by the mills. During the year, the hand-loom weavers suffered considerably from the high price of yarn and the scarcity of dyes, but the weaving mills did well with army orders. All the cotton mills in the Presidency were worked by joint-stock companies, the largest spinning concern being the Madura Mills which worked over 100,000 spindles and employed 1,700 men. The Buckingham Mills at Madras have over 2,000 looms and 70,000 spindles and employ more than 8,000 men in two factories. The number of mill hands in all the cotton mills in the Presidency was over 23,000. There were three jute mills working in the Circars. They have 293 looms and 6,556 spindles and find work for 2,450 employees. The leather and tanning industry does not for the most part come under the Factories Act, since it does not generally employ mechanical power. It is nevertheless an important industry and has been very fully employed during the year owing to the military requirements of Great Britain. The lack of sufficient tanning barks, however, has been a serious difficulty, and eventually, in order to ensure the export of a larger quantity of tanned hides, the Government of India was obliged to prohibit the tanning of skins. The great demand for tanned hides has resulted in a rapid rise in the number of large tanneries. There were in 1916–17 thirteen tanneries with an average of 50 or more employees, as against five in the previous year. The largest concern, that of Messrs. Chambers & Co. at Pallāvaram in the Chingleput district, employed 1,200 persons, which is more than double last year's figure. The coir industry on the West Coast suffered chiefly from the lack of shipping but found employment for some 2,000 hands. There were eighteen coffee works using mechanical power and one employing only hand labour: the average number of employees in all the coffee works was over 5,500. More than 11,000 persons were employed in cotton ginning and pressing, 19 mills having been newly registered under the Factories Act. The total number of cotton ginning works was 148, but many of these also did rice milling and the decorticating of groundnut. There were 127 registered rice mills employing nearly 8,500 persons besides four unregistered mills with 368 hands. Many other concerns do not appear in the statistics owing to their small size. The great majority of the rice mills are located in the delta districts of the East Coast. There were seven sugar factories in the Presidency employing an average of over 2,500 hands. Five iron and brass foundries at Madras found work for 1,055 employees. A very large number of men were employed in oil-mills, which are for the most part small local concerns. Tile works, chiefly on the West Coast, employed nearly 6,000 hands, while over 4,000 were employed in printing presses in Madras. In addition to the pioneer enterprises dealt with by the departments of Industries and Fisheries, there were 15 Government and local fund factories with 6,400 employees. The chief of these is the Cordite Factory; the various Government printing presses employed nearly 2,000 hands. About 14,000 men were employed in 19 railway workshops. A feature of the year was the recrudescence at Cochin, Calicut and Masulipatam, of ship-building, 9 wooden ships averaging 200 tons each having been built at Cochin and Calicut. The East India Distillery Company at Nellikuppam in South Arcot has started the manufacture of golden syrup, rum and sweets. Two brush factories have been opened at Madras. Besides the Cordite Factory, the Arsenal and the Army Clothing Factory, many factories, both Government and private, were largely engaged on military work. The Buckingham Mills turned out large quantities of material for the Army Clothing Factory. The activities of the Public Works Department are described elsewhere. A considerable amount of munitions work was done by the railway workshops and by some of the large private engineering companies.

Jute mills.

Leather.

Coir.

Coffee works.

Cotton-ginning.

Rice mills.

Sugar factories.

Other industries.

Government Factories.

New industries.

Military work.

The Indian Factories Act, 1916.

268. The total number of factories subject to control under the Act rose from 417 in 1915 to 460. Of these, six were removed towards the close of the year. The factories newly registered include 13 rice mills, 19 cotton ginning works, 4 decorticating mills and 5 tile works. Twenty factories were closed throughout the year. The average daily number of operatives employed was 91,415, being an increase of 6,996 over 1915. 15,799 women and 7,395 children were employed in factories, an increase of 2,208 women and 1,313 children. The increase is due to the additional factories registered, to the steady working of the textile factories and to the larger employment of women in cotton ginning. For the illegal employment of children, prosecutions were launched and convictions obtained against the managers of three factories. The general health of the operatives was good and the rules regarding sanitation were generally observed. There was a general increase in wages of skilled labourers due to a greater demand for them. Industrial development failed to attract labour from agriculture ; this was proved by the difficulty experienced in some of the larger factories in obtaining the necessary amount of labour, while in others, at the time of planting and harvesting, a large number of labourers refused to work. There was one strike during the year, which lasted longer than any previous strike. Two fires caused some damage but no loss of life. The managers of fifteen factories were convicted for failure to fence dangerous parts of machinery. An interval of half an hour was observed in 386 factories and a system of shifts was adopted in 34. Precautions were taken that women should not be employed more than eleven hours and the employment of children during the night hours was strictly prohibited. The total number of accidents increased during the year from 340 to 420, of which no less than 140 occurred in one factory. There were 13 fatal accidents resulting in the death of 15 persons.

The Department of Industries.

269. The year under review has been one of great opportunities combined with unexampled difficulties for industrial enterprise. The stoppage of imports, while giving almost complete protection to Indian industries, at the same time checked every experiment by making it impossible to procure plant ; this, added to the difficulty of getting expert assistance from Europe, made the results of the year on the whole disappointing. The visit of the Indian Industrial Commission helped to throw light on the openings, but did not do much in the way of removing the immediate difficulties. One important event was the transfer of pumping and boring to the control of the Agricultural Department. A proposed demonstration of a gas suction engine had to be postponed owing to the impossibility of shipping the plant from England. Arrangements have been made for a systematic survey of the rice mill industry with a view to improve the methods of manufacture. The attempt to establish a glass bottle industry at Madras was reluctantly abandoned, the chief difficulty lying in the fact that it is now impossible to obtain the services of a glass expert and that more or less amateur supervision must necessarily result in commercial failure. Similarly it has been found necessary to terminate the attempts to manufacture lime sand bricks on a commercial scale since it was not found feasible to produce bricks cheaply enough to compete with the superior qualities of clay bricks. The pencil industry has been more successful and, in spite of difficulties in procuring satisfactory raw materials, the department has managed to produce a pencil of fair quality and sell it at a small profit. Hitherto efforts to use Indian wood and Indian graphite have not been encouraging, but the raw materials for the industry have been obtained from East Africa and Ceylon. The position as regards dyes is unchanged ; it has been found unfeasible to replace synthetic dyes, even when their price is prohibitive, by the use of natural and indigenous colours. Two peripatetic weaving parties have done useful work in introducing improvements into the hand-loom weaving industry. Industrial education is still in an experimental stage, but the progress of the experiments is encouraging. The total expenditure of the department was Rs. 2,32,307, while the receipts were Rs. 19,245.

SEA-BORNE TRADE. (1916–17.)

[*Review of the Sea-Borne Trade of the Madras Presidency for the year 1916–17; Annual Volume of the Sea-Borne Trade and Navigation of the Madras Presidency; Statistics of British India, Part II, Commercial; Annual Statement of the Sea-Borne Trade with the British Empire and Foreign Countries; Annual Statement of the Coasting Trade and Navigation of British India; Review of the Trade of India for 1916–17.*]

General summary.

270. The aggregate value of the sea-borne trade of the Presidency was nearly Rs. 5,455 lakhs showing an increase of Rs. 569 lakhs, or 12 per cent, as compared with that of the preceding year, and an increase of Rs. 215 lakhs, or 4 per cent, when compared with the average for five years ending 1913–14, and only Rs. 361 lakhs, or 6 per cent, below the record figures of 1913–14. Government transactions amounted to Rs. 304 lakhs, or Rs. 222 lakhs more than those of 1915–16. Foreign trade continued to feel the effects of the war and in view of the difficulties of obtaining tonnage and the very high rates of freight, coupled with the restrictions extended to most commodities and exchange difficulties, it is remarkable that the total value of our sea-borne trade considerably exceeded that of the average for the five years immediately preceding the war. It must be borne in mind, however, that this increase was largely due to the high prices prevailing almost everywhere and that the quantity of trade borne by sea was in most cases materially less than in previous years. The United Kingdom has increased her trade with Madras both in imports and exports, and this is also true in the case of the United States of America and Japan. Foreign trade, including Government transactions, improved from Rs. 3,714 lakhs to Rs. 4,245 lakhs, or by 14 per cent. Coasting trade increased from Rs. 1,172 lakhs to Rs. 1,210 lakhs, or by 3 per cent. Excluding Government transactions, foreign trade improved by 9 per cent and coasting trade by 2 per cent. Under foreign trade, imports of private merchandize expanded from Rs. 1,153·20 lakhs to Rs. 1,285·59 lakhs, or by 11 per cent, due to increased values under cotton manufactures, paper and pasteboard, cotton twist and yarn, motor vehicles, spices, metals, chemicals, sugar, machinery and millwork, provisions, woollen manufactures and soap, while under railway materials, matches and cement there was a decrease. Exports improved from Rs. 2,458·27 lakhs to Rs. 2,591·27 lakhs, or by 5 per cent, and if the figures for tanned cow-hides shipped under Government control from September 1916 be added, the total exports show an increase of 13 per cent. The increase in value chiefly occurs under leather, raw cotton, oils, drugs and medicines, raw skins, raw rubber, spices, sugar, fish, manures, postal articles, raw jute and living animals. These increases were partly counterbalanced by decreases under grain and pulse, seeds, indigo, coffee and cotton twist and yarn. Imports of treasure declined from Rs. 2·87 lakhs to Rs. 2 lakhs, or by 30 per cent, while exports improved from Rs. 34·56 lakhs to Rs. 89·98 lakhs, or by 160 per cent, owing to larger shipments of rupees to Ceylon and the Straits Settlements. Under coasting trade imports of private merchandize declined from Rs. 660·32 lakhs to Rs. 612·75 lakhs, or by 7 per cent, owing to smaller imports of grain and pulse, while exports improved from Rs. 488·92 lakhs to Rs. 558·43 lakhs, or by 14 per cent, in consequence of larger shipments of coffee, coconuts, groundnut oil, manures, sugar, seeds and spices.

Balance of trade.

271. The excess of imports over exports was Rs. 1,475 lakhs as against Rs. 1,275 lakhs in 1915–16.

Customs revenue.

272. The total gross customs revenue was Rs. 101·21 lakhs, an increase over the previous year of Rs. 27·30 lakhs, or 37 per cent. The amount of import duty realized improved from Rs. 59·94 lakhs to Rs. 87·03 lakhs, or by 45 per cent, partly as a result of enhanced rates of duty leviable under the revised tariff of March 1916 and partly as the result of the high prices of the articles. Larger payments of duty were received on manufactured articles

(+ Rs. 11·69 lakhs or 89 per cent), sugar (+ Rs. 3·74 lakhs or 181 per cent), articles of food and drink (+ Rs. 3·02 lakhs or 80 per cent) and cotton manufactures (+ Rs. 2·40 lakhs or 30 per cent). The increase of Rs. 0·21 lakh, or 1·5 per cent, under export duty was the net result of larger collections on tea by Rs. 2·86 lakhs and smaller collections on rice by Rs. 2·67 lakhs.

Foreign Imports.

273. The following table shows the relative importance of the principal foreign articles, including treasure, imported into the Madras Presidency :—

Foreign imports.	Average for five years ending 1914-15.	1915-16.	1916-17.	Increase or decrease in 1916-17.	Percentage of total imports in 1916-17.
	RS.	RS.	RS.	RS.	
Cotton manufactures	3,32,04,987	2,29,54,757	2,76,28,496	+ 46,73,739	21·49
Cotton twist and yarn	1,06,73,573	1,28,80,301	1,43,46,272	+ 14,65,971	11·16
Metals and ores	1,37,32,321	1,09,36,382	1,17,10,594	+ 7,74,212	9·11
Sugar	52,65,012	58,38,809	65,02,548	+ 6,63,739	5·06
Oils	53,74,598	57,38,602	58,19,928	+ 81,326	4·53
Spices	43,77,354	48,19,459	56,68,590	+ 8,49,131	4·41
Machinery and millwork	54,77,083	38,38,932	44,88,454	+ 6,49,522	3·49
Paper and pasteboard	20,43,869	22,05,980	38,52,815	+ 16,46,835	3·00
Apparel (excluding hosiery, boots and shoes)	36,19,091	38,84,422	36,10,287	— 2,74,135	2·81
Railway plant and rolling-stock	80,94,981	68,51,019	35,56,410	— 32,94,609	2·77
Provisions and oilman's stores	23,15,964	24,48,970	30,57,508	+ 6,08,538	2·38
Motor-cars and motor-cycles	14,62,747	18,63,279	30,48,630	+ 11,85,351	2·37
Hardware	33,09,461	25,14,230	27,05,757	+ 1,91,527	2·10
Articles imported by post	16,62,235	21,71,638	26,13,390	+ 4,41,752	2·03
Chemicals and chemical preparations	9,73,599	16,61,020	24,40,945	+ 7,79,925	1·90
Liquors, methylated and perfumed spirits	19,49,699	18,77,588	21,10,393	+ 2,32,805	1·65
Soap	9,39,915	12,80,935	17,38,268	+ 4,57,333	1·35
Jute, raw and manufactures	9,81,481	13,99,359	15,40,369	+ 1,41,010	1·20
Instruments, apparatus, etc.	13,88,466	11,43,248	13,90,752	+ 2,47,504	1·08
Building and engineering materials	11,35,254	18,76,712	11,54,069	— 7,22,643	0·90
Drugs and medicines	11,34,735	10,81,503	11,37,439	+ 55,936	0·88
Arms and ammunition	10,86,823	9,83,288	10,85,182	+ 1,01,894	0·84
Stationery, excluding paper	7,43,614	7,02,433	10,60,329	+ 3,57,896	0·82
Animals, living	5,17,318	10,60,422	10,20,940	— 39,482	0·79
Wool, raw and manufactures	6,65,991	2,85,213	8,34,867	+ 5,49,654	0·65
Glass and glassware	16,15,995	5,10,252	8,24,619	+ 3,14,367	0·64
Rubber, raw and manufactures	2,51,630	7,31,170	7,99,471	+ 68,301	0·62
Haberdashery and millinery	8,69,573	6,72,891	7,36,785	+ 63,894	0·57
Paints and painters' materials	6,05,582	6,54,869	7,06,515	+ 51,646	0·55
Dyeing and tanning substances	13,39,948	2,88,634	6,80,964	+ 3,92,330	0·53
Silk, raw and manufactures	4,86,717	4,98,851	6,67,003	+ 1,68,152	0·52
Tobacco, raw and manufactures	4,26,341	4,50,142	6,59,176	+ 2,09,034	0·51
Wood and timber	8,12,377	7,21,784	6,08,636	— 1,13,148	0·47
Books and printed matter	4,12,348	6,48,032	6,00,557	— 47,475	0·47
Tea chests, entire or in sections	3,33,793	4,22,925	5,62,690	+ 1,39,765	0·44
Matches	11,48,724	11,31,008	5,35,474	— 5,95,534	0·42
Hides and skins, raw	5,47,824	3,57,830	5,00,138	+ 1,42,308	0·39
Fruits and vegetables	3,33,507	3,43,338	4,37,711	+ 94,373	0·34
Toys and requisites for games	3,28,585	3,42,723	3,82,963	+ 40,240	0·30
Belting for machinery	3,03,951	3,09,186	3,73,077	+ 63,891	0·29
Leather	3,94,936	3,70,620	3,49,885	— 20,735	0·27
Cycles	5,99,750	4,37,848	3,40,888	— 96,960	0·27
Gums and resins	2,59,241	2,52,940	2,99,367	+ 46,427	0·23
Clocks and watches	1,58,759	1,47,747	2,56,520	+ 1,08,773	0·20
Candles	2,88,099	1,79,341	2,50,220	+ 70,879	0·19
Earthenware and porcelain	3,45,974	2,62,517	2,15,236	— 47,281	0·17
Boots and shoes	2,03,044	1,72,655	1,50,358	— 22,297	0·12
Furniture and cabinetware	2,30,347	1,75,648	1,48,016	— 27,632	0·12
Manures	3,53,832	1,33,282	1,44,313	+ 11,031	0·11
Printing and lithographing materials	2,36,779	1,60,621	1,43,175	— 17,446	0·11
Jewellery and plate of gold and silver	3,20,089	1,07,829	1,11,828	+ 3,999	0·09
Coal, coke and patent fuel	3,03,466	2,31,297	42,428	— 1,88,869	0·03
Other articles	28,48,086	23,05,901	29,07,581	+ 6,01,680	2·26
Total, Merchandise	12,84,89,468	11,53,20,382	12,85,58,826	+ 1,32,38,444	100·00
Treasure—					
Gold	16,59,464	437	...	— 437	...
Silver	17,98,703	2,86,799	1,99,583	— 87,216	
Total, Treasure	34,58,167	2,87,236	1,99,583	— 87,653	
Total, Foreign Imports	13,19,47,635	11,56,07,618	12,87,58,409	+ 1,31,50,791	...

FOOD, DRINK AND TOBACCO.

Liquors.

274. The total value under food, drink and tobacco increased from Rs. 157·99 lakhs to Rs. 184·38 lakhs. The total import of liquors showed a decline of 25 per cent in quantity but the value rose by 13 per cent. Imports of malt liquors fell by 35 per cent in quantity, those from the

United Kingdom having decreased by 78,949 gallons or by 40 per cent Japan, Holland and Denmark supplied 9,321, 4,622 and 759 gallons of beer against 827, 2,770 and 2,022 gallons respectively in the previous year. Imports of spirits declined by 15 per cent, whisky showing a decrease of 28 per cent and brandy of 14 per cent. Imports of other sorts of spirits increased by 32 per cent. Imports of wine fell by 15 per cent, the decline being most marked under port and still red wines from the United Kingdom and France. Imports under provisions and oilman's stores totalled Rs. 30·58 lakhs compared with Rs. 24·49 lakhs in 1915–16. The chief increases were on biscuits and cakes and farinaceous and patent foods. Imports of spices advanced from Rs. 48·19 lakhs to Rs. 56·69 lakhs. Betelnuts which are the chief spices imported rose from 263,191 cwt. valued at Rs. 46·46 lakhs to 287,884 cwt. valued at Rs. 52·94 lakhs of which Ceylon and the Straits Settlements sent almost equal quantities. Imports of pepper increased threefold. Imports of sugar improved by 25 per cent in volume and 11 per cent in value. Refined sugar declined by 18 per cent in quantity and 7 per cent in value. Under the arrangements made by the Royal Commission appointed to control sugar supplies, Java sent large quantities of raw sugar to the United Kingdom and consequently was unable to send such large quantities as usual to India and imports thence declined by 14 per cent in quantity and 2 per cent in value. The local prices of "Java white" rose from Rs. 35 per bag of 2 cwt. to Rs. 38¼ in May 1916 and to Rs. 44 at the end of November, but thereafter gradually declined the closing price being Rs. 40¼. The decrease of 69 per cent in supplies from Mauritius was likewise due to purchases by the Commission on behalf of the French Government. Imports of unrefined sugar advanced by 34 per cent. This was to some extent the natural outcome of the shortage under refined sugar. Two large consignments were received for the first time from the Philippine Islands. There were no imports either from Java or Mauritius. Imports of molasses from Java increased fourfold and were used principally for distillery purposes. The total imports of tobacco improved by 27 per cent in quantity and 46 per cent in value, although the quantity imported was much below the pre-war average. Imports of raw tobacco showed a decline of 21 per cent in quantity and 10 per cent in value, those from the United Kingdom and Holland having fallen from 42,708 and 41,425 lb. to 36,594 and 31,705 lb. respectively. A consignment of 1,908 lb. was imported from the United States of America for the first time. Imports of cigarettes improved by 103 per cent in quantity. The United Kingdom supplied 133,044 lb. compared with 65,765 lb. in 1915–16.

Provisions and oilman's stores.

Spices.

Sugar.

Tobacco.

275. The total value under this head improved from Rs. 77·45 lakhs to Rs. 82·05 lakhs. The quantity of mineral oils showed a fall of 7 per cent but there was a slight rise amounting to 1 per cent in the value. The figures for kerosene oil show a decrease of 20 per cent in quantity and 8 per cent in value. The average price has risen by one anna per gallon in each of the last two years and now stands at As. 8-4. Imports of Borneo oil showed a further drop of 51 per cent but imports of American oil rose by 22 per cent. This increase is due to consignments intended for Pondicherry and Karikal being landed at Madras instead of being imported by sea direct. The decrease in the imports of foreign oil was partly met by larger imports of Burma oil which increased by about half a million gallons. Liquid fuel showed an increase of over a million gallons, or 65 per cent. Lubricating oils showed a rise of 11 per cent. There have been no imports of foreign petrol during the past four years. Coastwise imports of petrol advanced from 930,496 gallons to 1,337,206 gallons owing to the large number of motor vehicles which have been imported in the last two years. The imports of raw silk from China showed a recovery. The cessation of imports of jarrah wood from Western Australia brought about a fall of 14 per cent under wood and timber. Imports of teak from Siam, which ceased during the previous two years revived and amounted to Rs. 1·67 lakhs. Fewer palmyra rafters were received from Ceylon.

RAW MATERIALS AND PRODUCE.

Oils.

Textile materials.

Wood and timber.

MANUFACTURES.

276. The total value of imports under this head increased from Rs. 884·39 lakhs to Rs. 981·99 lakhs. The fall of Rs. 2·96 lakhs or 7 per cent in the total value under apparel was due to smaller imports of gold and silver thread from France which decreased from Rs. 32·30 lakhs to Rs. 29·94 lakhs and resumed the normal. The imports of gold thread by land from Pondicherry declined from Rs. 6·69 lakhs to Rs. 0·31 lakh. Imports of boots and shoes further declined from Rs. 1·73 lakhs to Rs. 1·5 lakhs. Motor vehicles and accessories rose from Rs. 18·63 lakhs to Rs. 30·49 lakhs. The number of motor cars imported increased from 454 to 560. Imports of motor vehicles would have been considerably greater but for the embargo placed on them towards the close of December last. The number of motor cycles also went up from 279 to 360, of which 305 were of British manufacture. 107 motor wagons (87 from the United States of America and 20 from the United Kingdom) were imported against 6 in the previous year. Imports of cycles and accessories further declined. The value of chemicals imported (other than chemical manures) again showed a remarkable increase of nearly Rs. 8 lakhs. The main factor in this increase was the large quantity of soda compounds (especially cyanide of sodium for the Mysore Gold Mines) which was imported. 82 per cent of the chemicals came from the United Kingdom. Under drugs and medicines, imports of camphor decreased by 31 per cent in quantity and 23 per cent in value, practically the whole coming from Japan. Clocks and watches improved from Rs. 1·48 lakhs to Rs. 2·57 lakhs and cutlery from Rs. 0·73 lakh to Rs. 1·1 lakhs. There was an increase of 8 per cent in the value of hardware but imports were still far below the average imports before the war. 73 per cent of the imports came from the United Kingdom, 11 per cent from the United States and 4 per cent from Japan. Instruments and apparatus showed an increase of Rs. 2·48 lakhs, mainly due to the increase in the number of electrical appliances. When compared with the previous year there was some recovery in dyeing and tanning substances imports of which amounted to Rs. 6·81 lakhs against Rs. 2·89 lakhs but they were far below the pre-war averages. Imports of alizarine amounted to 50,772 lb. valued at Rs. 3·04 lakhs and these came from the United Kingdom. In 1915-16 there were no imports from the United Kingdom. Prices of both alizarine and aniline were phenominally high. Imports of aniline dyes amounted to 49,240 lb. valued at Rs. 2·26 lakhs against 11,355 lb. valued at Rs. 0·43 lakh. Of this year's imports 45,717 lb. came from the United Kingdom. Imports of paints and painters' materials improved from Rs. 6·55 lakhs to Rs. 7·07 lakhs. Although there was some recovery in the imports of glassware (from Rs. 5·10 lakhs to Rs. 8·25 lakhs), yet they represented only 48 per cent of the annual average imports before the war. The United Kingdom supplied 53 per cent and Japan 20 per cent against 43 and 33 per cent respectively in the previous year. Before the war the shares of these two countries were only 11 and 1 per cent. Imports of earthenware amounted to Rs. 2·15 lakhs compared with Rs. 2·63 lakhs in 1915–16. Imports of machinery improved by Rs. 7·13 lakhs, or 17 per cent. The United Kingdom sent 84 per cent of the machinery and the United States of America 12 per cent. The extension of Government control over iron and steel industries in the United Kingdom, the high prices at the supplying centres and the shortage of tonnage, all combined to bring about a decline of 20 per cent in quantity. The urgent demand for the available material, however, brought about a rise of 13 per cent in value ; and the local price of iron has more than doubled since the commencement of the war. Previous to the war the United Kingdom supplied 45 per cent of the iron and steel imported into this Presidency. This share increased to 80 per cent in 1916–17. Belgium prior to the war sent 40 per cent. Supplies from America have fallen from 22 per cent in 1915–16 to 13 per cent. Imports of bar iron improved by 58 per cent in volume and 131 per cent in value. Bars of Pondicherry manufacture rose from Rs. 5·23 lakhs to Rs. 8·33 lakhs. On the other hand steel bars showed a decline of 70 per cent and plates and sheets of 36 per cent. There was an unprecedented demand

Apparel.

Cycles and motor cars.

Chemicals, drugs and medicines.

Cutlery, hardware, implements and instruments.

Dyes and colours.

Glassware and earthenware.

Machinery.

Iron and steel.

Other metals.

for copper both in Europe and America for munitions, and consequently exports to India fell by 63 per cent in quantity and 38 per cent in value. The United Kingdom supplied 82 per cent against 73 per cent in 1915–16 and Japan 13 per cent against 7 per cent. Imports of yellow metal sheets showed a decline of 61 per cent and those of braziers and sheets 86 per cent. Imports of tin rose by 31 per cent as a result of larger receipts from the Straits Settlements. Imports of lead increased by 11 per cent. Only 2 cwt. of aluminium were imported. The total value of imports of paper and pasteboard amounted to Rs. 38·53 lakhs against Rs. 22·06 lakhs, an increase of 74 per cent although there was a decline in the quantities imported. Paper and stationery. The imports under railway plant again declined from Rs. 68·51 lakhs to Rs. 35·56 lakhs, or by 48 per cent, carriages and wagons falling from Rs. 30·27 lakhs to Rs. 18·71 lakhs, locomotives and tenders from Rs. 23·35 lakhs to Rs. 4·03 lakhs and materials for construction from Rs. 14·89 to Rs. 12·82 lakhs. Railway plant and rolling-stock. Of the total imports 75 per cent came from the United Kingdom and 25 per cent from the United States against 95 and 2 per cent, respectively, in 1915–16. The value of yarns and textiles improved from Rs. 386·10 lakhs to Rs. 454·42 lakhs. Yarns and textile fabrics. The total value of imports of cotton goods, representing 33 per cent of the total foreign imports, increased by 17 per cent. Cotton goods. The market at Madras showed considerable fluctuations during the year and it often happened that piece-goods, bought in a moment of considerable activity, actually arrived to a dull market. The chief feature of the year was the speculative purchases of coloured yarns and goods owing to the general view that the scarcity of dye stuffs would cause a considerable rise in the price of dyed goods. Imports of cotton twist and yarn declined by 29 per cent in quantity but rose by 11 per cent in value. Mule yarn declined by 56 per cent, the high rates prevailing in Manchester enabling Indian mills to compete successfully in producing fancy classes of yarn. The total import of cotton piece-goods further decreased by 19 per cent in quantity, but increased by 20 per cent in value. The decrease in quantity was the net result of smaller imports of grey and white piece-goods partly set off by larger imports of coloured goods. The trade in cotton piece-goods was almost entirely confined to the United Kingdom, only 1 per cent coming from other sources. Imports of arms, ammunition and military stores improved from Rs. 9·83 lakhs to Rs. 10·85 lakhs. Other minor items. Imports of cement, mainly from the United Kingdom, declined from Rs. 16·04 lakhs to Rs. 8·58 lakhs owing to the high cost and the difficulty of obtaining supplies. Imports of safety matches declined from Rs. 6·13 lakhs to Rs. 3·94 lakhs and other matches from Rs. 5·18 lakhs to Rs. 1·41 lakhs. Japan sent Rs. 3·01 lakhs' worth of matches, Sweden Rs. 1·21 lakhs, and Norway Rs. ·63 lakh against Rs. 4·40 lakhs, Rs. 4·77 lakhs and Rs. 1·60 lakhs, respectively, in 1915–16. Imports of soap improved from Rs. 12·81 to Rs. 17·38 lakhs. Articles imported by post amounted to Rs. 26·13 lakhs against Rs. 21·72 lakhs.

277. The following table gives the value and relative importance of the principal articles of Indian produce and manufacture, including treasure, exported from the Madras Presidency to foreign countries :— **Foreign Exports.** INDIAN PRODUCE AND MANUFACTURES.

Indian produce and manufactures.	Average for five years ending 1914–15.	1915–16.	1916–17.	Increase or decrease in 1916–17.	Percentage of total exports in 1916–17.
	RS.	RS.	RS.	RS.	
Leather	3,60,66,498	4,49,72,985	5,87,23,728*	+ 1,37,50,743	22·85
Grain and pulse	2,05,98,352	4,05,97,512	3,30,22,174	— 75,75,338	12·85
Cotton, raw	3,49,52,663	1,74,09,658	2,39,33,311	+ 65,23,653	9·32
Seeds	4,13,65,037	2,86,62,155	2,14,19,999	— 72,42,156	8·34
Tea	1,34,75,675	1,73,76,053	1,75,85,439	+ 2,09,386	6·84
Cotton manufactures	93,86,908	1,24,54,434	1,21,76,035	— 2,78,399	4·74
Rubber, raw and manufactures ...	41,82,518	96,41,286	1,14,43,059	+ 18,01,773	4·45
Oils	43,61,940	53,67,618	77,81,856	+ 24,14,238	3·03
Coffee	1,45,24,777	92,42,013	75,36,078	— 17,05,935	2·93

* Excludes Rs. 1,78,63,434 the value of exports of tanned cow hides shipped on Government account.

Indian produce and manufactures.	Average for five years ending 1914-15.	1915-16.	1916-17.	Increase or decrease in 1916-17.	Percentage of total exports in 1916-17.
	RS.	RS	RS.	RS.	
Spices	58,89,288	59,58,274	75,00,663	+ 15,42,389	2·92
Dyeing and tanning substances ...	14,02,451	1,16,68,650	73,84,380	— 42,84,270	2·87
Coir, raw and manufactures	75,93,309	63,70,660	63,98,489	+ 27,829	2·49
Oil-cakes	50,24,821	51,51,367	48,92,063	— 2,59,304	1·90
Articles exported by post ...	30,68,383	40,38,667	46,86,055	+ 6,47,388	1·82
Hides and skins, raw	33,38,900	26,72,416	46,53,900	+ 19,81,484	1·81
Drugs and medicines	8,21,685	12,69,288	34,97,059	+ 22,27,771	1·36
Fruits and vegetables	27,55,581	33,28,292	31,70,273	— 1,58,019	1·23
Fish (excluding canned fish) ...	23,50,087	23,26,243	30,58,420	+ 7,32,177	1·19
Animals, living	23,58,681	15,86,238	19,98,383	+ 4,12,145	0·78
Fibre for brushes and brooms	14,48,519	17,27,545	19,84,713	+ 2,57,168	0·77
Jute, raw and manufactures	23,70,411	12,69,163	17,11,680	+ 4,42,517	0·67
Sugar	11,52,468	5,16,548	17,07,548	+ 11,91,000	0·66
Wood and timber	17,52,449	14,35,018	15,59,870	+ 1,24,852	0·61
Manures	4,84,218	8,05,201	14,90,582	+ 6,85,381	0·58
Cotton, twist and yarn...	26,14,620	25,86,199	11,68,905	— 14,17,294	0·46
Hemp, raw and manufactures ...	7,16,624	7,86,098	9,54,243	+ 1,68,145	0·37
Tobacco, raw and manufactures ...	8,94,987	8,64,257	9,51,463	+ 87,206	0·37
Provisions and oilman's stores ...	7,44,063	7,91,705	9,29,118	+ 1,37,413	0·36
Mica	5,82,003	3,75,116	6,05,161	+ 2,30,045	0·24
Silk, raw and manufactures	2,82,286	3,26,489	5,73,010	+ 2,46,521	0·22
Building and engineering materials .	2,70,501	3,77,517	5,08,392	+ 1,30,875	0·20
Wool, raw and manufactures ...	3,79,581	3,61,890	3,59,114	— 2,776	0·14
Metals and ores	3,41,217	37,134	2,61,105	+ 2,23,971	0·10
Fodder, bran and pollard	2,93,675	1,27,959	53,165	— 74,794	0·02
Horn and hornmeal	2,74,669	25,870	24,666	— 1,204	0·01
Other articles	24,22,113	11,61,072	12,53,864	+ 92,792	0·50
Total, Merchandise ...	23,05,41,958	24,36,68,590	25,69,57,963	+ 1,32,89,373	100·00
Treasure—					
Gold	9,81,465	2,32,863	7,955	— 2,24,908	
Silver	52,79,935	32,23,289	89,90,210	+ 57,66,921	
Total ..	62,61,400	34,56,152	89,98,165	+ 55,42,013	..
Total, Exports ...	23,68,03,358	24,71,24,742	26,59,56,128	+ 1,88,31,386	...

FOOD, DRINK AND TOBACCO.

278. The total value under food, drink and tobacco declined from Rs. 811 lakhs to Rs. 754·7 lakhs. The exports of grain and pulse declined by 18 per cent in quantity and 19 per cent in value. Exports of paddy improved by 76 per cent in quantity and 83 per cent in value, while those of rice declined by 23 per cent in quantity and 21 per cent in value. Shipments of rice and paddy to Ceylon represented 90 per cent of the total exports under this head and declined by 19 per cent both in quantity and value. This was partly due to want of tonnage and partly to larger supplies from Burma to that colony. The average value of rice rose from Rs. 8–3–9 toRs. 8–7–5 per hundredweight. There was a very slight decline in the quantity of spices exported, but the value rose by 26 per cent. During the first nine months of the year under review shipments of pepper fell away by 47 per cent in quantity and 21 per cent in value when compared with those in the corresponding period of 1915–16. During the last three months, however, shipments increased sixfold in quantity and ninefold in value. The final figures for the whole year showed a decline of 9 per cent in quantity and a rise of 36 per cent in value, the average value having risen from As. 4–8 to As. 7 per pound. Shipments to the United States and the United Kingdom decreased from Rs. 18·24 and Rs. 15·22 lakhs to Rs. 16·90 and Rs. 14·21 lakhs respectively, the pre-war average shipments to these countries being Rs. 5·34 and Rs. 3·17 lakhs. Shipments to France and Italy however showed a marked recovery from Rs. 1·51 and Rs. 2·13 lakhs to Rs. 13·21 and Rs. 4·95 lakhs respectively. There was a great recovery in the exports of sugar (mostly unrefined sugar) from 60,897 cwt. valued at Rs. 5·17 lakhs to 220,684 cwt. valued at Rs. 17·08 lakhs and exports almost reached the level of 1912–13. The area of sugarcane under cultivation increased by 20 per cent and the total yield by 31 per cent. Shipments to Ceylon improved from Rs. 3·53 lakhs to Rs. 14·77 lakhs. Shipments of unrefined sugar to the United Kingdom practically ceased. The exports of tea amounted to 24·91 million pounds valued at Rs. 175·85 lakhs against 25·84 million pounds valued at Rs. 173·76 lakhs, a decrease

Grain, pulse and flour.

Spices.

Sugar.

Tea.

of 4 per cent in quantity and an increase of 1 per cent in value. The coffee crop turned out better than that of the previous season, but exports declined 17 per cent in quantity and 18 per cent in value. As in the previous year 48 per cent went to the United Kingdom whereas France increased her receipts from 24 to 26 per cent. Exports of tobacco increased by nearly a million pounds and amounted to 3·95 million pounds. The value likewise rose by almost a lakh and reached Rs. 9·51 lakhs. As usual the chief consumers were the Straits Settlements and the Federated Malay States. Shipments of cigars further declined.

Coffee.

Tobacco.

279. The total value of exports of raw materials increased from Rs. 706·03 lakhs to Rs. 784·18 lakhs. Exports of raw hides from the Madras Presidency improved by 11 per cent in quantity and 31 per cent in value. The whole quantity went to the United Kingdom. Raw skins consisting almost entirely of goat skins expanded by 15 per cent in weight and 75 per cent in value. The marked increase in price is ascribed to the large demand for tanned skins at the London sales which reacted on the local market. The share of the United Kingdom rose from 18 to 32 per cent, while that of the United States fell from 53 to 36 per cent. There was again a considerable increase in the quantity of oil exported and the value rose by Rs. 24·14 lakhs to Rs. 77·82 lakhs. Exports of coconut oil, representing more than half the quantity of all oils, amounted almost to the same quantity as in the previous year, namely, 2·02 million gallons, but the value rose from Rs. 38·57 lakhs to Rs. 42·53 lakhs, a rise of 10 per cent. The value of shipments to the United Kingdom improved from Rs. 21·54 lakhs to Rs. 34·25 lakhs, the average exports before the war being valued at Rs. 6·15 lakhs. Shipments to the United States have been prohibited since July 1916. Exports of castor oil increased from 384,305 gallons valued at Rs. 5·02 lakhs to 1,016.905 gallons valued at Rs. 14·30 lakhs. The United Kingdom imported castor oil to the value of Rs. 13·07 lakhs against Rs. 3·92 lakhs. Shipments of groundnut oil also increased. In 1916–17 the quantity of seeds exported declined by 44 per cent and the value by 25 per cent, representing only 8·34 per cent of the total foreign exports, although this was formerly the chief item of the export trade. The trade in groundnuts represented 68 per cent of the total exports of seeds. Before the war the exports annually averaged 197,318 tons valued at Rs. 344·49 lakhs and France was the chief consumer. During 1914–15 there was a decline of 42 per cent in quantity and 45 per cent in value. In 1915-16, however, the trade with foreign countries revived and large consignments of nuts were sent to Marseilles. The shortage of tonnage to Mediterranean ports gave rise to considerable anxiety as to the disposal of the season's harvest which was above the average, and prices dropped considerably. The position improved somewhat towards the close of the official year and an outlet was found by considerable exports to the Straits Settlements. The figures for the whole year disclose a fall of 56 per cent in quantity and 49 per cent in value. The high prices prevailing in 1915–16 induced cultivators to sow more crops and the area under groundnuts in 1916–17 increased by 60 per cent. The estimated yield is 30 per cent above that of the previous year and is given as 825,000 tons. Exports to France declined by 59 per cent in quantity and 52 per cent in value. Shipments to Italy and the United Kingdom increased slightly. The total quantity shipped at Madras was 56,819 tons compared with 97,535 tons in 1915–16, a decrease of 42 per cent. Exports from Pondicherry showed a decrease of 54 per cent. Inasmuch as Germany was formerly by far the largest importer of copra, with Belgium and Russia standing next, it was only to be expected that the complete cessation of exports to these countries would have a very serious effect on the trade in this product. This was early realized and manufacturers in England turned their attention to producing 'vegetable butter.' They also bought large quantities of coconut-oil. France increased her imports of copra and during the last two years her share has been 56 and 83 per cent and the United Kingdom's share 43 and 12 per cent, respectively.

RAW MATERIALS.

Hides and skins, raw.

Oils.

Seeds.

Groundnuts.

Copra or coconut kernels.

During 1916–17 exports of copra improved by 61 per cent in quantity and 65 per cent in value. The total value under textile materials improved from Rs. 196·27 lakhs to Rs. 268·12 lakhs. Exports of raw cotton showed a decline of 2 per cent in volume and a rise of 37 per cent in value. Shipments during the first nine months showed an increase of 8 per cent in quantity and 54 per cent in value. Owing to scarcity of tonnage very little was shipped in January 1917 and there were no shipments during February and March. The area under cotton cultivation was estimated at 2,288,000 acres, an increase of 11 per cent. The estimated yield was 377,000 bales, and increase of 6 per cent. Shipments to Japan expanded by 64 per cent, while those to the United Kingdom and Italy declined by 80 and 19 per cent, respectively. The increase in the exports to Japan was due partly to relatively low freights and partly to the expansion in the trade in textiles. With an increase of Rs. 1·25 lakhs the total value of the exports of wood and timber stood at Rs. 15·44 lakhs. Exports of teak and other timber amounted to Rs. 1·84 lakhs against Rs. 1·92 lakhs and of sandalwood to Rs. 13·59 lakhs against Rs. 12·27 lakhs. Exports of raw rubber have shown large increases every year and in 1916–17 further improved by 31 per cent in quantity and 19 per cent in value. Shipments to the United Kingdom, Ceylon and the United States amounted to Rs. 77·89, 29·70 and 6·57 lakhs, respectively, against Rs. 63·65, 28·90 and 3·39 lakhs in 1915–16.

Textile materials.

Wood and timber.

Rubber.

MANUFACTURED ARTICLES.

280. The total value of exports of manufactured articles increased from Rs. 862·03 lakhs to Rs. 963 lakhs. Exports of cinchona bark amounted to 688,143 lb. valued at Rs. 1·73 lakhs against 607,807 lb. valued at Rs. 1·30 lakhs in 1915–16. Shipments were confined to the United Kingdom. Consignments of *nux vomica* declined from 2,225 tons valued at Rs. 3·28 lakhs to 2,172 tons valued at Rs. 3·53 lakhs and were sent to the United Kingdom and the United States. Shipments of senna have again shown a considerable increase and rose from 1,599 tons to 4,753 tons and from Rs. 7·49 lakhs to Rs. 29·03 lakhs. Rs. 20·14 lakhs' worth was sent to the United Kingdom compared with Rs. 5·80 lakhs' worth in 1915–16 and the United States and France increased their supplies from Rs. 0·91 lakh and Rs. 0·55 lakh to Rs. 4·41 lakhs and Rs. 3·03 lakhs, respectively. The remarkable expansion referred to in last year's report under the head of dyeing and tanning substances was not maintained and exports declined from Rs. 116·69 lakhs to Rs. 73·84 lakhs. Exports of indigo receded from 1,308 tons to 614 tons, or by 53 per cent, and from Rs. 108·77 lakhs to Rs. 67·55 lakhs, or by 38 per cent. The average value rose from Rs. 416 to Rs. 550 per cwt. Shipments to the United Kingdom, representing 60 per cent of the total exports, declined from Rs. 89·93 lakhs to Rs. 41·86 lakhs, while those to Egypt, the United States and Italy improved from Rs. 9·53 lakhs, Rs. 3·95 lakhs and Rs. 1·87 lakhs to Rs. 15·26 lakhs, Rs. 6·02 lakhs and Rs. 2·62 lakhs, respectively. The area under indigo in 1916–17 is reported to have been 449,900 acres, or double the actual area sown in 1915–16. The yield was estimated at 2,954 tons, or about two and a half times last year's estimate. The total exports of tanned hides and skins on private account decreased by 16 per cent in quantity but increased by 30 per cent in value. Exports on private and Government account combined showed an increase of 24 per cent in weight and 70 per cent in value. The total shipments of tanned hides showed an expansion of 23 per cent in quantity and 54 per cent in value. Exports of all tanned hides were almost entirely confined to the United Kingdom. Exports of tanned skins improved by 27 per cent in weight and 88 per cent in value. There was an extraordinary demand from Europe and America during the year under review and prices rose steadily until December 1916. At the end of the year the export of tanned skins was prohibited to the United States of America, and from January 1917 a fall has taken place. Under goat skins the United Kingdom increased her imports by 25 per cent and the United States by 13 per cent. The United Kingdom received sheep skins valued at Rs. 108·81 lakhs, the United States Rs. 36·83 lakhs and Japan Rs. 15·03

Chemicals, drugs and medicines.

Dyes and colours.

Hides and skins, tanned or dressed, and leather.

lakhs against Rs. 48·73 lakhs, Rs. 19·66 lakhs and Rs. 8·86 lakhs, respectively in the previous year. Exports of cotton twist and yarn declined in quantity from 5·96 million lb. to 1·81 million lb. or by 70 per cent and from Rs. 25·86 lakhs to Rs. 11·69 lakhs or by 55 per cent in value. The trade with Shanghai, which was considerable in 1915–16 was not maintained. Exports of cotton piecegoods slightly declined. Under coloured goods the value of lungis and saris rose from Rs. 103·50 lakhs to Rs. 108·55 lakhs. The export trade in Madras handkerchiefs made by handlooms declined from Rs. 13·73 lakhs to Rs. 4·19 lakhs partly owing to the restriction placed on the import of these goods into the United Kingdom. Exports of coir manufactures consisting chiefly of coir yarn and matting, amounted to Rs. 63·54 lakhs. Oil cakes to the value of Rs. 48·92 lakhs were exported against Rs. 51·51 lakhs in 1915–16. Articles exported by post improved from Rs. 40·39 lakhs to Rs. 46·86 lakhs.

Yarns and textile fabrics.

Coir manufacture.

Oil cakes.

281. The total value of re-exports amounted to Rs. 21·69 lakhs against Rs. 21·59 lakhs in the previous year. Cotton piecegoods sent to the Straits Settlements, the Federated Malay States and Ceylon accounted for Rs. 8·43 lakhs, or 39 per cent, and articles by post for Rs. 6·92 lakhs, or 32 per cent.

Re-exports.

282. There were no imports of gold during the year under review, whereas the average imports of gold prior to the war amounted to Rs. 38·3 lakhs. Exports of gold declined from Rs. 2·33 lakhs to Rs. 0·08 lakh. Imports of silver declined from Rs. 2·87 lakhs to Rs. 2 lakhs. The quantity of bar silver amounted to 66,175 oz. valued at Rs. 1·55 lakhs, against 144,760 oz. valued at Rs. 2·57 lakhs. Imports from the United Kingdom declined from Rs. 2·53 lakhs to Rs. 0·01 lakh, while those from the Straits Settlements rose from Rs. 48 to Rs. 1·53 lakhs. Imports of Government of India rupees amounted to Rs. 43,300 against Rs. 28,000 in the previous year. Exports of silver consisting mostly of rupees shipped to Ceylon (Rs. 80 lakhs), the Straits Settlements (Rs. 8·9 lakhs) and the Federated Malay States (Rs. 1 lakh), were valued at Rs. 89·9 lakhs compared with Rs. 32·23 lakhs in 1915–16.

Treasure.

Gold.

Silver.

283. The total value of Government stores imported and exported amounted to Rs. 97·12 lakhs and Rs. 179·23 lakhs respectively, compared with Rs. 63·13 lakhs and Rs. 1·55 lakhs in the previous year. The increase of Rs. 33·98 lakhs under imports was brought about by larger receipts of apparel (+ Rs. 17·77 lakhs), cotton goods (+ Rs. 16·93 lakhs), hardware (+ Rs. 3·04 lakhs), and drugs and medicines (+ Rs. 2·15 lakhs), but imports of chemicals declined by Rs. 4·58 lakhs. Imports were mostly from the United Kingdom. The increase under exports was due to the shipment of Rs. 178·63 lakhs' worth of tanned cow hides to the United Kingdom on Government account.

Government Transactions

284. Previous to the war the total tonnage of shipping averaged 3·96 million tons per annum. In 1914–15 there was a decrease of a million tons and during the past two years a further drop to 2·28 million tons. On the other hand the actual number of vessels has steadily increased and amounted to 4,161 against a pre-war average of 3,343. The average tonnage per vessel was 549 tons against 677 in the previous year and less than half the average for the five years ending 1913–14. This result was due to the larger number of native craft now employed. Excluding the ferry steamers plying daily between Dhanushkodi and Talaimannar, the average tonnage of British vessels entering and clearing was 1,835 and that of foreign vessels 2,341 tons. Of the 26 vessels which entered under foreign colours 5 were Norwegian, 5 Dutch, 4 Russian, 4 Swedish, 2 French, 2 Greek, 2 Italian, 1 American and 1 Arabian. The tonnage of British vessels amounted to 87 per cent of the whole against 86 per cent in 1915–16. British Indian vessels and native craft claimed 7 per cent against 5 per cent in the previous year. The number of native craft engaged in foreign trade rose from 1,020 to 1,289 and their tonnage from 63,980 to 88,431.

Shipping.

Foreign Trade. Distribution of foreign trade by countries.

285. The following table shows how the trade of the Madras Presidency with foreign countries was distributed :—

Countries.	Imports.			Exports.			Total of imports and exports.			Percentage which the total of one country bears to the whole.	
	Average for five years ending 1914-15.	1915-16.	1916-17.	Average for five years ending 1914-15.	1915-16.	1916-17.	1915-16.	1916-17.	Increase or decrease in 1916 17.	1915 16.	1916-17.
	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.		
British Empire—											
United Kingdom	853·76	762·70	856·89	673·80	946·57	1,004·92	1,709·27	1,861·81	+ 152·54	47·33	48·02
Ceylon	58·16	69·15	74·78	424·51	644·59	603·53	713·74	678·31	— 35·43	19·76	17·50
Straits Setilements, etc. (including Labuan).	52·55	71·63	80·76	105·25	127·39	142·67	199·02	223·43	+ 24·41	5·51	5·76
Canada	...	...	0·40	33·15	2·55	2·61	2·55	29·01	+ 26·46	0·07	0·75
Mauritius	4·63	10·87	0·94	17·57	23·00	27·10	34·87	24·04	— 10·83	1·08	0·73
Victoria	6·36	12·70	11·22	7·40	8·87	9·39	21·57	20·61	— 0·96	0·60	0·53
Federated Malay States	0·15	0·60	1·09	10·92	13·03	15·77	13·63	16·86	+ 3·23	0·33	0·43
Egypt	0·25	0·63	0·10	5·00	9·77	15·99	10·45	16·09	+ 5·64	0·29	0·42
New South Wales	1·21	0·27	0·22	4·11	5·66	9·06	5·93	9·28	+ 3·35	0·16	0·24
Bahrein Islands	...	...	0·03	3·72	3·45	3·71	3·45	3·74	+ 0·29	0·09	0·10
Natal	0·44	2·06	0·12	3·14	5·15	2·17	7·21	2·29	— 4·92	0·20	0·06
Aden and Dependencies	0·06	0·03	0·37	1·49	0·65	0·44	0·68	0·81	+ 0·13	0·02	0·02
Hongkong	1·52	0·19	0·34	1·64	0·02	0·13	0·21	0·47	+ 0·26	0·01	0·01
Western Australia	5·96	3·09	0·02	0·47	0·41	0·40	3·50	0·42	— 3·08	0·10	0·01
Other British Possessions	0·48	0·32	0·36	4·63	4·18	4·60	4·50	4·96	+ 0·46	0·12	0·13
Total, British Empire ...	9·85·53	934·29	1,027·64	1,296·85	1,800·29	1,864·49	2,734·58	2,896·13	+ 161·55	75·72	74·71
Foreign countries—											
Europe—											
France	39·16	42·35	40·61	345·65	279·14	235·87	321·49	276·48	— 45·01	8·90	7·13
Italy	2·25	1·70	2·41	3·43	61·93	65·04	63·63	67·45	+ 23·82	1·76	1·75
Sweden	10·75	13·39	7·60	4·36	...	...	13·89	7·60	— 6·29	0·38	0·20
Norway	2·18	4·55	4·31	0·43	0·82	3·09	5·37	7·40	+ 2·03	0·15	0·19
Switzerland	1·45	1·87	2·35	0·19	3·76	2·93	5·63	5·28	— 0·35	0·16	0·13
Holland	4·39	4·45	3·09	20·26	7·44	0·91	11·89	4·00	— 7·89	0·33	0·10
Spain	0·20	0·23	0·30	5·47	8·80	2·80	9·03	3·10	— 5·93	0·25	0·08
Germany	62·45	3·64	0·46	197·53	...	...	3·64	0·46	— 3·18	0·10	0·01
Belgium	40·98	1·73	0·33	101·62	...	...	1·73	0·33	— 1·40	0·05	0·01
Austria-Hungary	22·91	0·02	0·20	41·11	...	...	0·02	0·20	+ 0·18	...	0·01
Russia	2·43	0·01	..	10·14	1·52	0·15	1·53	0·15	— 1·38	0·04	...
Portugal	0·08	0·05	0·04	3·07	2·03	...	2·08	0·04	— 2·04	0·06	...
Other countries	0·22	0·50	0·13	0·71	0·41	...	0·91	0·13	— 0·78	0·03	...
Total, Europe ...	189·45	74·99	61·83	769·27	365·85	310·79	440·84	372·62	— 68·22	12·21	9·61
Asia—											
Japan	10·87	23·70	26·87	141·43	82·52	187·01	106·22	213·88	+ 107·66	2·95	5·52
Java	39·92	42·18	33·78	1·76	1·55	1·06	43·73	34·84	— 8·89	1·21	0·90
China (excluding Hongkong and Macao).	4·05	4·27	5·36	31·45	34·58	13·90	38·85	19·26	— 19·59	1·08	0·50
Philippines	0·01	...	15·77	0·34	...	...	...	15·77	+ 15·77	...	0·41
Arabia (excluding Aden) ...	0·45	0·04	...	4·91	7·02	6·10	7·06	6.10	— 0·96	0·19	0·16
Turkey (Asiatic)	1·11	2·00	4·24	3·95	0·27	1·27	2·27	5·51	+ 3·24	0·06	0·14
Sumatra	2·44	...	...	1·07	5·77	4·24	5·77	4·24	— 1·53	0·16	0·11
Siam	1·15	0·75	2·32	...	0·09	0·17	0·84	2·49	+ 1·65	...	0·06
Indo-China	...	...	...	1·38	3·02	2·41	3·02	2·41	— 0·61	0·08	0·06
Borneo (Dutch)	4·07	...	...	...	...	...	...	...	...	...	...
Other countries	0·23	0·61	...	2·00	4·99	1·27	5·60	1·27	— 4·33	0·18	0·03
Total, Asia ...	64·35	73·55	88·34	188·29	139·81	217·43	213·36	305·77	+ 92·41	5·91	7·89
Africa—											
Réunion	0·05	0·03	0·11	4·17	...	3·25	0·08	3·36	+ 3·28	...	0·09
Other countries	0·11	...	0·02	0·55	0·53	0·63	0·53	0·65	+ 0·12	0·01	0·01
Total, Africa ...	0·16	0·08	0·13	4·72	0·53	3·88	0·61	4·01	+ 3·40	0·01	0·10
America—											
United States	45·35	70·29	107·65	73·75	151·77	190·61	222·06	298·26	+ 76·20	6·15	7·69
Other countries	...	...	...	0·02	0·02	0·07	0·02	0·07	+ 0·05	...	...
Total, America ...	45·35	70·29	107·65	73·77	151·79	190·68	222·08	298·33	+ 76·25	6·15	7·69
Total, Foreign countries ...	299·31	218·91	257·95	1,036·05	657·98	722·78	876·89	980·73	+ 103·84	24·23	25·29
Grand Total ...	1,284·89	1,153·20	1,285·59	2,332·90	2,458·27	2,591·27	3,611·47	3,876·86	+ 265·39	100·00	100·00

Imports and exports of treasure and Government stores are excluded from the above table. Of the aggregate trade in the Madras Presidency the British Empire's share, which before the war amounted to 63 per cent, improved to 75 per cent both in 1915–16 and 1916–17.

General effect of the war.

286. Prior to the outbreak of the war the trade of the Madras Presidency with the Continent amounted to 28 per cent of the total foreign trade ; in 1914–15 it dropped to 20 per cent, in 1915–16 to about 12 per cent and in 1916–17 to 10 per cent. Imports declined by Rs. 13·16 lakhs or 17 per cent and exports by Rs. 55·06 lakhs, or 15 per cent, making a total deficit of Rs. 68·22 lakhs, or 16 per cent.

Europe.

287. Trade with France, which amounted to 7 per cent of the total foreign trade, fell away by Rs. 45 lakhs, or 14 per cent, the fall being chiefly

due to the decline in the export of groundnuts and coffee. The trade with Italy improved by Rs. 3·82 lakhs as there were larger shipments of pepper, raw cotton and groundnuts but shipments of raw hemp declined. Smaller arrivals of matches and iron and steel reduced the trade with Sweden by Rs. 6·29 lakhs. There have been no exports to that country during the past two years. Trade with Norway expanded by Rs. 2·03 lakhs owing to larger shipments of copra. Holland received less coir manufactures and Spain less raw cotton and groundnuts than in the previous year, and the trade with these two countries was reduced by Rs. 7·89 lakhs and Rs. 5·93 lakhs respectively. There was very little variation in the trade with Switzerland which amounted to Rs. 5·28 lakhs. There were no imports from Russia and exports to that country declined from Rs. 1·52 lakhs to Rs. 0·15 lakh. The small quantity of imports from enemy countries represents goods landed from prize vessels. The trade with Asiatic ports, other than British ports, improved by Rs. 92·41 lakhs, or 43 per cent, and represented 8 per cent of the aggregate trade. The trade with Japan expanded by Rs. 107·66 lakhs, or 101 per cent. Larger arrivals of articles by post, stationery, paper and pasteboard, haberdashery and cotton hosiery, partly set off by smaller receipts of camphor and matches improved the imports from that country by Rs. 3·17 lakhs. Exports were larger by Rs. 104·49 lakhs, raw cotton, tanned sheep skins and articles by post contributing to the increase. By sending two large consignments of sugar the Philippine Islands increased their trade with Madras at the expense of Java. The trade with China declined by Rs. 19·19 lakhs owing to smaller exports of cotton. The trade with Africa, excluding Egypt, improved from Rs. 0·61 lakhs to Rs. 4·01 lakhs on account of large shipments of rice to Réunion. There was a further expansion of Rs. 76·25 lakhs, or 35 per cent, in the trade with America, practically the whole of which was confined to the United States. The total trade amounted to Rs. 298·33 lakhs or was nearly double the pre-war total and formed 7·69 per cent of the total trade. Imports showed an increase of Rs. 37·36 lakhs, or 53 per cent, chiefly under motor vehicles, railway plant and rolling-stock and mineral oils. Exports expanded by Rs. 38·89 lakhs chiefly owing to larger shipments of tanned skins.

Asia.

Africa.

America.

288. The aggregate value of coasting trade improved from Rs. 1,172 lakhs to Rs. 1,210 lakhs or by 3 per cent, Rs. 1,171 lakhs representing private merchandise and Rs. 39 lakhs treasure and Government stores. Imports coastwise of Indian produce declined from Rs. 586·65 lakhs to Rs. 530·96 lakhs, or by 9 per cent, while those of foreign merchandise increased from Rs. 73·66 lakhs to Rs. 81·79 lakhs, or by 11 per cent. Exports of both Indian and foreign produce increased by 13 and 56 per cent respectively, the figures for the former being Rs. 541·48 lakhs and the latter Rs. 16·95 lakhs. The decline of Rs. 1·21 lakhs in imports from Bombay was the net result of smaller receipts of grain and pulse, coffee, cotton twist and yarn, salt, coriander seeds and copper, partly counter-balanced by larger imports of raw cotton, sugar and paper and pasteboard. The expansion of exports to Bombay was due to increased shipments of coffee, groundnuts, coconuts, drugs and medicines, copra, dried fruits, timber, betelnuts, pepper, groundnut oil, sandalwood, ginger and manures, but shipments of raw cotton and rice declined. There was decrease of Rs. 38·03 lakhs in the imports from Burma, the net result of smaller imports of grain and pulse, partly met by larger receipts of teak, petrol, kerosene-oil and raw hides. The increased exports to Burma were brought about by heavier shipments of groundnut oil, gingelly seeds, coconut oil, coffee and coir manufactures, but shipments of cotton piece-goods and groundnuts declined. Smaller imports of coal (— Rs. 13·23 lakhs) and jute gunny bags (— Rs. 3·77 lakhs) reduced the imports from Bengal by Rs. 16·35 lakhs and smaller shipments of rice (— Rs. 9·51 lakhs), coconut oil, groundnuts, coir manufactures and indigo, partly set off by larger shipments of cotton twist and yarn and salt brought about a decrease of Rs. 9·32 lakhs in exports to Bengal.

Coasting trade.

Bombay.

Burma.

Bengal.

Ports.

289. The following table shows the total trade (excluding Government transactions) and comparative importance of the principal ports in the Madras Presidency :—

Ports.	Average for five years ending 1914–15.	1915–16.	1916–17.	Increase or decrease in 1916–17.	Percentage of trade of the whole Presidency for 1916–17.
	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	LAKHS. RS.	
1. Madras	2,038·31	2,027·75	2,311·75	+ 284·00	44·88
2. Tuticorin	868·70	765·48	830·17	+ 64·69	16·11
3. Cochin	644·34	555·29	556·89	+ 1·60	10·81
4. Dhanushkodi	14·90	241·87	299·72	+ 57·85	5·82
5. Calicut	240·85	228·51	259·16	+ 30·65	5·03
6. Mangalore	188·52	176·31	214·76	+ 38·45	4·17
7. Negapatam	186·32	175·56	149·08	— 26·48	2·90
8. Cocanada	280·02	206·77	126·62	— 80·15	2·46
9. Cuddalore	167·38	103·41	78·07	— 25·34	1·51
10. Tellicherry	128·83	80·47	74·63	— 5·84	1·45
11. Kulasēkarapatnam	21·48	23·35	33·59	+ 10·24	0·65
12. Badagara	48·68	26·07	29·08	+ 3·01	0·56
13. Cannanore	47·06	19·36	15·55	— 3·81	0·30
14. Porto Novo	50·18	24·50	14·55	— 9·95	0·28
15. Bimlipatam	34·50	12·87	13·06	+ 0·19	0·25
16. Masulipatam	12·17	6·16	10·33	+ 4·17	0·20
17. Pamban	17·41	15·08	9·07	— 6·01	0·17
18. Vizagapatam	26·82	8·67	8·77	+ 0·10	0·17

The relative importance of the trade of the outports remained much the same as in the previous year. Cocanada which occupied the sixth place in 1915–16, ranked eighth in the year under review. Sea-borne trade on private account at the port of Madras represented 45 per cent of the trade of the whole Presidency compared with 42 per cent in the previous year.

Miscellaneous.

290. The total revenue receipts for the Presidency increased from Rs. 79,31,527 to Rs. 1,07,06,467, or by 35 per cent. The total disbursements on account of customs for the whole Presidency amounted to Rs. 7,01,480 compared with Rs. 5,77,094 in 1915–16. The number of offences dealt with under the Sea Customs Act during the year was 1,494 against 1,488 in the previous year. Penalties realized Rs. 27,019. Eight hundred and ninety-four cases occurred at Madras and 600 at the outports. At Madras there were three cases of smuggling of opium. In one of these, the quantity seized was 512 tolas. At Negapatam 55 seers of opium and 46 seers of ganja were seized in a native craft which cleared at dead of night but was overtaken. On the Karikal frontier, a case of smuggling of 7,000 bars of silver valued at Rs. 32,000 was detected. The silver was confiscated.

PUBLIC WORKS—GENERAL. (1916–17.)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1916–17.*]

Administrative changes.

291. The two temporary engineers and staff appointed in 1914 for the investigation and execution of works connected with the Forest Department were placed under the control of the Forest Commissioner with effect from the 1st April 1916. The committee appointed by the Government of India to inquire into and report generally on the organization and the system of administration of the Buildings and Roads branch of the Public Works Department, sat in Madras in February 1917 and examined seventeen witnesses. With a view to provide for the open market a larger supply of trained mechanics than has hitherto been available, the Government increased the number of apprentice workmen undergoing training in the Public Works Workshops. Ten more officers of the engineer establishment and nine officers of the upper subordinate establishment left for military duty during the year. Two other officers were wounded and received the Military Cross. In the I Circle the Gōdāvari Eastern and the Gōdāvari Conservancy

divisions were reconstituted into three divisions, viz., the Gōdāvari Eastern, the Gōdāvari Headworks and the Gōdāvari Conservancy divisions. In the IV Circle the territorial limits of the Headquarters and Coimbatore subdivisions of the Coimbatore division were re-arranged during the year. The Tank Restoration Scheme division of the Circle was abolished and its works were distributed among the Tank Restoration Scheme divisions of the VI and VII Circles and the Salem division, IV Circle.

292. Seventy-two estimates of the aggregate value of Rs. 104·19 lakhs were scrutinized in the section during the year; seventeen of these (totalling Rs. 23·88 lakhs) dealt with water-supply, including schemes for Bellary (Rs. 8·09 lakhs), Madras (Rs. 9·70 lakhs) and Anantapur (Rs. 2·58 lakhs); eleven estimates (for Rs. 51·5 lakhs) were for drainage works, especially at Madras (Rs. 39·93 lakhs), Adōni (Rs. 3·28 lakhs) and Vellore (Rs. 4·23 lakhs); twenty-six estimates totalling Rs. 19·09 were for roads and bridges, the chief works being new bridges over the Mahanadi at Aska (Rs. 2·50 lakhs) and over the Netravati river at Panemangalore (Rs. 3·98 lakhs) and the widening of the Government House and Penitentiary bridges at Madras (Rs. 3·20 lakhs). The Consulting Architect to Government prepared 250 drawings for various buildings and also specifications and schedules of quantities for most of them. Of these the more important are the new General Hospital and University Library at Madras, the new hospitals at Vizagapatam and Masulipatam and the St. George's Homes' School at Kethi. Four revised type-designs were prepared during the year. In addition to this work, 155 estimates and designs with an aggregate value of Rs. 87,09,156 were scrutinized. Of these, 16 were for buildings estimated to cost over one lakh of rupees each, 13 for buildings costing from Rs. 50,000 to Rs. 1,00,000 and 126 for buildings costing less than Rs. 50,000. Amongst the more expensive estimates are the new Forest College at Coimbatore, the Medical School hostel at Royapuram, and the new Engineering College at Guindy. The investigation of the Coimbatore hydro-electric scheme and of a scheme to supply the town of Ootacamund with electricity had to be held over for the present owing to the shortage of establishment. The subject of supply of electricity to the town of Madura until the Periyār scheme materializes, is under consideration. To provide for the increased prices of materials and for the additional requirements of the authorities of the New Engineering College, Guindy, a revised estimate for an installation amounting to Rs. 1,68,800 has been prepared and is under consideration. The subject of a testing laboratory for the Electrical Inspector has been investigated and detailed estimates for the building and equipment expected to cost Rs. 25,000 are under preparation. The Electrical Inspector scrutinized 96 estimates with an aggregate value of Rs. 1,64,115. Of these seven were for installations costing over Rs. 5,000 and 26 for installations costing from Rs. 1,000 to Rs. 5,000. The more important works completed were electric installations at the Penitentiary, Madras (Rs. 5,977), and the New Court House, Egmore (Rs. 3,697). The work at the King Institute, Guindy, estimated to cost Rs. 28,876 is practically completed, as also the installation of electric cranes, lifts, lights and fans at the Stationery stores, Madras (Rs. 73,770). The installation at the Royapuram Hospital is finished except for the new sub-station plant and mains which cannot be got from England. The number of electric installations under Public Works Department maintenance is 74. With the exception of six, all were inspected and tested. The amount spent on their maintenance apart from actual consumption charges was Rs. 36,951. There are 129 electric plants in the Presidency notifiable under the Act and of these 118 were inspected during the year. The Madras Electric Supply Corporation and Madras Electric Tramways works necessitated 194 inspections. As in previous years the standard of work of the majority of electrical contractors is decidedly poor. Out of the 21 cinema companies touring the Presidency, 6 were inspected during the year. The number of

Chief Engineer's office.

Technical section.

Consulting Architect's section.

Electrical Department.

accidents reported was eight of which seven were trivial. The serious case occurred in the East India Distilleries, Nellikuppam, and resulted in the death of a workman. The increase in the use of electricity in Madras City is being well maintained. The number of consumers at the end of the year 1916 had increased from 2,009 to 2,305 and the quantity of electricity sold from 5·1 to 5·7 million units. About 54 industrial concerns are being worked with electric power. The suburban extensions to Kilpauk, Royapuram and Adyar have been further delayed by the difficulties of obtaining materials from Home.

CIVIL WORKS. (1916–17.)

Works in progress.

Buildings.

293. The expenditure for the year, including expenditure from contributions, minor works and repairs, was Rs. 61·23 lakhs as compared with Rs. 69·92 lakhs in the previous year. The construction of the general hospital at Guntūr (estimate Rs. 1,43,000) was continued during the year and Rs. 40,505 was spent, bringing up the total outlay on the work to Rs. 80,328. The main building and several quarters connected with the Central Police Recruits' School at Anantapur (revised estimate Rs. 2,44,903) were completed. The municipal hospital at Bellary was finished except for certain details and fittings. Additions and improvements to the Queen Mary's College for Women, Madras, were completed during the year at a total cost of Rs. 2,19,779. The outlay during the year amounted to Rs. 31,808. Satisfactory progress was made in the construction of the new Engineering College at Guindy estimated to cost Rs. 15,05,000. The amount spent during the year was Rs. 2,81,084 and the total outlay on the work to the end of the year is Rs. 4,73,221. The construction of the new Court-house for the Chief Presidency Magistrate at Egmore was completed, except for a few details. The estimated cost of the work is Rs. 1,12,631. The total outlay was Rs. 1,00,979 inclusive of Rs. 43,080 spent during the year. The new building for the Stationery stores at North Beach Road, Madras, was practically completed at a total cost of Rs. 3,56,832. The construction of the main ward for the new hospital at Royapuram was finished and other subsidiary buildings were in progress. The total outlay is Rs. 3,59,433, of which Rs. 97,957 were spent during the year. The Central Agricultural College and Research Institute, Coimbatore (estimate Rs. 10,25,172), were nearly completed. The new Collector's office at Madura was finished except for a few details and the building was occupied. The total outlay

Imperial civil works.

was Rs. 4,11,214 against an estimate of Rs. 4,00,500. Good progress was made on improvements to the customs accommodation at Cochin, work

Communications.

amounting to Rs. 25,011 being done during the year. The construction of the new Kalingia Ghaut road (estimate Rs. 1·86 lakhs) progressed, the outlay during the year being Rs. 39,841. Rs. 20,668 were spent during the year on the girder bridge over the Aliyar river at Yakkara (estimated cost

Port and Marine works.

Rs. 1,09,600). The whole of the steel work of the pier at Tellicherry was erected. The outlay during the year amounted to Rs. 1,22,511 bringing up the total outlay to Rs. 1,59,820. Work amounting to over a lakh of rupees

Water-supply and drainage.

was done on water-supply schemes both at Masulipatam and at Ellore. More than four lakhs were spent on the Madura drainage scheme and considerable progress was made with the water-supply at Erode and the improvements to the Madura water-works. Work on other schemes was generally restricted by war conditions.

Workshops.

294. The Dowlaishweram Workshops, formerly a separate subdivision attached to the late Gōdāvari Eastern division, are now part of the Gōdāvari Head Works division under the direct charge of the Executive Engineer. The value of the work done was Rs. 1,45,986 against Rs. 1,57,359 of the previous year, the fall of Rs. 11,373 being mainly due to the general curtailment of works owing to the war. Amongst the work turned out was the improvement of five barges for use in Mesopotamia. At Bezwada the value of the work done was Rs. 1,00,707 against Rs. 1,08,604 in 1915–16, and Rs. 1,18,825 in 1914–15. The shops lent a big lathe to the railway shops

at Perambur for munitions manufacture, and a few tram trucks and one mile of tram line were sent to Mesopotamia. An order for 170 buoys for use on the rivers in Mesopotamia has been executed. The Presidency Workshops, Madras, turned out work to the value of Rs. 3,24,506 against Rs. 2,40,314 in the previous year. The increase of Rs. 84,192 was under non-provincial works and works for other departments and quasi-public bodies. Though the manufacture of high explosive shells was discontinued, the making of minor military supplies was undertaken extensively.

RAILWAYS AND TRAMWAYS. (1916-17.)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1916-17; Statistics of British India, Part III—Commercial Services.*]

Control.

295. The main railway systems are controlled by the Railway Board and the district board railways are subject to the general control of this Government.

Development.

296. There was no addition to the working mileage during the year and the total mileage of the railway systems was therefore the same as in the previous year, viz., 3,805 miles, of which 1,716 were broad gauge, 1,966 metre gauge, and 123 miles narrow gauge. Besides these extents, there were also 210 miles of railway owned by the Tanjore, Kistna, Coimbatore and Guntūr District Boards. The construction of the Tirutturaippūndi-Vēdāranniyam railway of the Tanjore District Board and the Suramangalam-Salem railway of the Salem District Board was completed, but the lines could not be opened during the year owing to deficiency of rolling-stock and difficulties caused by the war. Work on the construction of the Tinnevelly-Tiruchendur railway was also suspended for this reason. The Quilon-Trivandrum extension was under construction. The survey of three new railways was completed but four new district board lines could not be surveyed owing to lack of staff. At the instance of the Mysore State, an officer of the Railway Board has investigated four lines with a view to connecting Mysore with the West Coast and opening up the district of Coorg. Two other lines, viz., Attur-Tirumandorai and Attur-Perambalūr, were investigated as alternatives to the Attur-Chinnasalem connexion contemplated by the South Arcot and Salem District Boards; but Government, on considering the three alignments, recommended the construction of the Attur-Chinnasalem line in preference to the other two. The total number of new district board railways and other lines under consideration is 44.

Accidents.

297. There was an unusually large number of accidents during the year under review. A collision on the main line at Trichinopoly Fort resulted in slight injuries to five third-class passengers and two railway servants. On the night of the 22nd and 23rd November 1916 a cyclone of intense severity struck the coast of South India with the result that the Boat Mail and the Tuticorin Express capsized at Mailam and Pakkam stations, respectively. Three passengers and one mail sorter of the Boat Mail and thirteen passengers of the Express were slightly injured. The rolling-stock was also damaged. A collision at Nandalur on the Madras and Southern Mahratta Railway resulted in some damage to rolling-stock and injuries to passengers. A derailment between Rungapuram and Betamcherla stations due to a broken rail caused some damage to the rolling-stock and permanent-way and slight injury to a passenger. In another derailment between Navabpalem and Nidadavolu the three rear vehicles of the train capsized down the embankment. The permanent-way was badly torn up and eight people suffered slight injuries. In a collision between the South Indian Railway mail and a goods special at Katpadi station due to a wrong setting of points, six passengers were slightly injured. While lifting an old girder from the piers of a bridge between Settigunta

and Koduru the crane capsized carrying with it the girder, crane support wagon, twin timber truck and brakevan. The craneman and gang cooly were killed and the permanent-way inspector, a fireman, and 5 gang coolies injured.

District Board Railways

298. The model agreement for working district board railways was still under the consideration of the Railway Board. The conclusion of the agreements for the several district board lines now open is deferred pending the final settlement of the model agreement. The Bezwada-Masulipatam Railway earned a net profit of Rs. 2·30 lakhs which worked out at 10·40 per cent on the capital outlay. The profits of the Tenali-Rēpalle Railway, the Tanjore District Board Railway and the Pōdanūr-Pollachi Railway on the same basis of calculation were ·13, 8·16 and 3·08 per cent, respectively.

Tramways.

299. The Madras Electric Tramway was the only tramway system; the Company operated a route mileage of 14 miles, 6 furlongs and 107 yards, of which 5 miles, 1 furlong and 76 yards were double track. The plant at the power station, namely, two Burnley horizontal engines, two Willans central valve engines and one Diesel oil-engine, was used only as a standby, current being obtained from the Madras Electric Supply Corporation, Limited. The rolling-stock consisted of 72 motor-cars, 14 trailers, 1 bond testing car, 1 road metal carrying car and 1 watering car. The average daily service was 66 cars or three more than in the previous year. The car mileage was 1,598,157 and the number of passengers carried 20,395,294. The Company had a net balance £17,396 on the year's working.

PUBLIC WORKS—CANALS. (1916–17.)

Canals.

300. Navigation was carried on as usual on the Chilka Lake canal, the Dumagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vēdāranniyam canals. Excluding the West Coast canals for which figures are not available, the total receipts amounted to Rs. 2,47,478 and were Rs. 12,699 more than in the preceding year; the increase occurred chiefly under the Kistna canals and was due to a larger number of boats having taken out licences and more revenue being realized on wharfage fees and boat rent, the canals having been navigable throughout the season.

Traffic.

301. Compared with the figures of the previous year, there was a decrease under 'number of passengers', 'ton mileage' and 'value of goods.' The decrease in the number of passengers occurred mainly in the Kistna canals and was due chiefly to the opening of the Guntūr-Tenali-Rēpalle railway.

PUBLIC WORKS DEPARTMENT—IRRIGATION. (1916–17.)

Gross Expenditure and Revenue.

302. The expenditure incurred on and the revenue derived from irrigation works were Rs. 71,61,302 and Rs. 2,63,27,903 respectively against Rs. 81,15,716 and Rs. 2,75,80,236 in the previous year. The area charged as irrigated was 7,279,619 acres.

Class I—Major Protective Works.

303. There were four works sanctioned under this head—the Rushikulya system in the Ganjām district, the Bhavanasi tank project in the Guntūr district, the Mopad reservoir project in the Nellore district and the Venkatapuram tank project in the Kurnool district. The Rushikulya system was in operation and the other three works were still under construction. The capital outlay under this head was Rs. 2,76,056 (direct and indirect), the bulk of which was spent on the projects under construction. The area irrigated under the Rushikulya system was 101,954 acres of first crop and 2,692 acres of second crop. The gross revenue (including old irrigation revenue) and working expenses

were Rs. 2,36,591 and Rs. 80,183 respectively against Rs. 2,66,094 and Rs. 79,227 in the previous year. The net revenue, deducting interest charges, showed a deficit of Rs. 1,24,837 against Rs. 1,02,026 in the preceding year.

Productive Works.

304. The capital outlay on productive works aggregated Rs. 6,34,586 (direct and indirect) and was mainly incurred on the Gōdāvari and the Kistna delta systems, the Kurnool-Cuddapah canal, the Toludur project and the Cauvery delta system. The Toludur project was the only work of this class under construction. In the Gōdāvari delta system, the works in progress were improvements to the Yenamadurru drain, remodelling the Chinchinada channel, excavating a new approach channel to the Bobberlanka lock, protecting with steel sheet piles the lower margin of the impervious apron below the Dowlaishwaram head-sluice and constructing a retaining wall on the right side of the main canal below the head-sluice, restoring the Kovvur-Manjair junction canal and improvements to the mouth of the Tuliabhaga drain. In the Kistna delta system, the improvement to the Ryves regulator were completed and the provision of steel lock-gates for the Sitanagaram head lock was in progress. In the Kurnool-Cuddapah canal, the Chepad and the Ukkayapalli projects were under execution. In the Cauvery delta system the improvements to the Manniar and the Vellapalam Uppanar were in progress, while those for the Pillai Voikal and the Morakkakorayar were almost completed. The total area charged as irrigated was 2,985,600 acres under first crop and 485,665 acres under second crop against 3,007,893 acres and 491,946 acres respectively in the previous year.

Revenue.

305. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 1,54,26,216 and Rs. 31,11,209, respectively, against Rs. 1,59,01,094 and Rs. 34,04,097 in the previous year. The net revenue due to improvements was Rs. 83,36,100 which represented a return of 9·63 per cent on the capital outlay of Rs. 8·66 crores. The profit for the year after deducting interest charges was Rs. 56,61,858, the accumulated profits to the end of the year amounting to Rs. 16·18 crores. The gross revenue, when compared with that of the previous year, showed a decrease of Rs. 4,74,878 which occurred chiefly under the Gōdāvari, the Kistna and the Cauvery delta systems.

Expenditure under Revenue Account.

306. There was a decrease of Rs. 2,92,888 under "Working expenses", the expenditure in the previous year having been particularly heavy, chiefly owing to the reconstruction of the Bezwada head works and the strengthening of the Kistna flood banks damaged by the floods of 1914.

Remissions.

307. The remissions granted under protective and productive works were Rs. 4,386 and Rs. 2,36,569 against Rs. 2,347 and Rs. 1,30,127 in the previous year. The bulk of the remissions was granted in the Gōdāvari and the Kistna delta systems.

Class II. Minor Works and Navigation.

308. The capital outlay incurred on "Minor works and navigation" was Rs. 2,00,194 (direct and indirect) which was incurred chiefly on the Siddapur project in the Kurnool district, the Panjapatti project in the Trichinopoly district and the Kaniyampalayam project in the Coimbatore district. The area charged as irrigated by this class was 269,224 acres under first crop and 87,437 acres under second crop against 269,463 acres and 94,003 acres respectively in the previous year. The gross revenue and working expenses including old irrigation revenue and old maintenance charges amounted to Rs. 14,14,605 and Rs. 3,88,646 against Rs. 15,17,813 and Rs. 4,20,224 in the previous year; the net revenue due to improvements decreased by Rs. 58,383. Remissions, which decreased from Rs. 10,006 to Rs. 6,956, were granted principally under the Ganjām minor rivers system and the Pālār anicut system.

Class III Works.

309. The outlay on this class of works amounted to Rs. 24,35,469 including the outlay incurred by Civil officers and accounted for by the Civil department. The area charged as irrigated was 3,347,047 acres and the revenue derived amounted to Rs. 91,57,003, including Rs. 45,607

collected in the Public Works Department. Rs. 4,98,608 were remitted against Rs. 4,40,432 in the previous year.

Tank Restoration Scheme.

310. The area under all works in the Presidency to be investigated under the Tank Restoration Scheme, classes III (*a*) and III (*b*), was calculated to be about 103,750 square miles. The area of minor basins entered upon at the beginning of the year was 83,157 square miles, of which 77,055 square miles had been investigated. No new area was entered upon during the year. The area investigated was, however, increased to 77,558 square miles and the remaining 5,599 square miles were under investigation. In the area completely investigated, works were executed for 68,511 square miles, and in progress for 4,507 square miles; for the balance of 4,540 acres works were not commenced. The estimates sanctioned for Government works during the year amounted to Rs. 2,98,430 against Rs. 2,65,217 in the previous year, the amount sanctioned for Government works from the beginning of the operations up to the end of the year being Rs. 1,37,66,171. The expenditure during the year was Rs. 3,31,615 excluding percentage charges.

Class IV. Agricultural Works.

311. The outlay incurred on these works decreased from Rs. 6,68,807 to Rs. 6,55,973 and the revenue realized, Rs. 93,488, exceeded that of the previous year by Rs. 18,829.

Investigation of Projects.

312. The estimate for the Cauvery reservoir project was further revised and forwarded to the Government of India for obtaining the sanction of the Secretary of State. The Kistna reservoir project was ordered to be kept in abeyance until a decision was come to in respect of the Cauvery reservoir project. The plans and estimates for the Vengalapuram project in the Nellore district, the Velgode project in the Kurnool district, the improvements to the Kurnool-Cuddapah canal and the Cardamom Hills project in the Madura district were still under consideration. The Board's report on the financial aspect of the Uttaramerur project in the Chingleput district was received and the scheme was under the consideration of Government.

Small Projects.

313. In the Ganjām district, the investigation connected with the improvements to the Girisola channel was completed and plans and estimates were under preparation. Investigation was in progress in connexion with the improvements to the Korathala Tampara and the Jayamangalam channel. The Vamsadhara project and the proposed anicut across the Langulya were still under consideration. The feasibility of the Thandava or Tuni river project in the Vizagapatam district was under examination. In the Gōdāvari district estimates for the extension of irrigation to the Coringa and Polavaram islands were examined by the Chief Engineer for Irrigation and returned to the Superintending Engineer for revision. The detailed investigation of a scheme to irrigate an area of 10,768 acres by pumping from the Kistna river at Pratur was approved and the necessary establishment therefor sanctioned during the year. In the Kurnool district a full report on the investigation of the Thippayapalaiyam project together with a rough estimate of cost was under preparation. In the Coimbatore district, the investigation connected with the resluicing of some of the Amarāvati channels was completed and plans and estimates prepared. The revenue aspects of the Amarāvati project were under the consideration of Government. The further consideration of the Meengarai and the Malapuzha projects was held in abeyance pending the settlement of the question of supply available. Proposals to render the Nilambūr river suitable for the transport of forest produce were investigated and an estimate was prepared. Investigation connected with the improvements to the Tennēri tank and supply channel in the Chingleput district was completed and an estimate was under preparation. The proposal connected with the supply channel to the Kolathur tank was still under the consideration of the Local Government. Further information was called for on the Thambipettai Odai project—a scheme for feeding a system of four tanks in the South Arcot district. The Tennel project was abandoned as the local officers' reports showed that the supply

in the Pombay river was very spasmodic. The Uppalavadi project was still under the consideration of the local officers. The details of the works proposed in connexion with the Chidambaram drainage scheme were being worked out by the local officers. Detailed plans and estimates for the works necessary to prevent damage by floods caused by the spill of the Vellār were submitted to the Chief Engineer. The proposals for the improvements to the Vadavar were generally approved by the Chief Engineer and detailed plans and estimates were called for. A preliminary report for draining the Kaliveli swamp near Muttupet to enable dry crops to be raised thereon was received. In the Trichinopoly district, preliminary proposals for the improvements to the Thottiem Chinna Voikal were approved. Detailed estimates for the improvements to the Musiri Nattu Voikal and the Ponnēri channel and for resluicing the Vangal and Pugalur channels were under the consideration of the local officers. Particulars regarding the porosity of the soil and sub-soil at the site of the proposed reservoir at Ladapuram were collected and the discharges observed in connexion with the Kanagachittoor project were under scrutiny in the office of the Chief Engineer for Irrigation.

Miscellaneous.

Floods.

314. During the year the highest flood in the Gōdāvari river was 9·55 feet on the crest of the anicut at Dowlaishwaram on the 3rd August 1916. In the Kistna the maximum flood was 21·05 feet on the crest of the Bezwada anicut on the 2nd November 1916. In the Tungabhadra the highest reading was 10·4 feet on the crest of the anicut at Sunkesula. The Cauvery rose to 11·7 feet on the Cauvery dam north gauge on the 19th October 1916. In the Vaigai the highest flood was recorded at Peranai on the 15th October 1916 when the front reading at the regulator with two shutters raised by 7 feet was 10·5 feet above the sill.

Breaches and accidents.

315. The right flood bank of the Kistna breached in the fourth mile at Pratur at the site of the old breach of 1914 and the flood water augmented by the heavy local rainfall wholly or partly submerged an extent of 80,000 acres in the Tenali and Rēpalle taluks. Owing to the heavy floods in the Tungabhadra in October 1916, there were many breaches in the Kurnool-Cuddapah canal, the most important being those in the 24th and 43rd miles. The Pennēr anicut at Adinimayapalle was also damaged. Heavy rains caused damage to the Venkatapuram, Kocheruvu and other tanks in the Kurnool district. Prompt action was taken to ringbund the breaches and avert damage to irrigation. The heavy floods in October in the rivers of the Salem district breached the Kothampundi, Edappadi and Chinnappanbatti tanks. The Leddivadi anicut and the anicuts on the Vasishtanadi were damaged. During the cyclone of November 1916 there were unprecedented floods in the Vasishtanadi river in the Salem district causing breaches in some of the anicuts and damaging the rest. In the North Arcot division though the number of tanks affected by the cyclone was large, yet very few breached. In the South Arcot division some of the tanks under the Tirukkōyilūr anicut system were breached besides many minor tanks.

Ayacut maps.

316. The ayacut maps for the Gōdāvari delta were completed and those for the Kistna delta were under revision by a special staff appointed for the purpose. The preparation of the maps for the Kurnool-Cuddapah canal was in progress. Block map tracings for the Cauvery delta were prepared and sent to the Survey office for print.

CHAPTER V.

REVENUE AND FINANCE. (1916–17.)

[*Statistics of British India, Part IV (a) and (b)—Finance and Revenue.*]

REVENUE AND FINANCE OTHER THAN MUNICIPAL.

(*a*) GROSS REVENUE.

Revenue and Expenditure.

317. The following statements exhibit the Imperial and Provincial revenue and expenditure as well as the Capital expenditure on State Railways and Irrigation Works not charged to Revenue during each of the past two years :—

Imperial and Provincial Funds—Receipts.

Principal Heads of Revenue.	Imperial.		Provincial.		Total.	
	1915-16.	1916-17.	1915-16.	1916-17.	1915-16.	1916-17.
	RS.	RS.	RS.	RS.	RS.	RS.
I. Land Revenue	3,48,96,931	3,50,08,412	3,48,96,931	3,50,08,412	6,97,93,862	7,00,16,824
II. Opium	4,02,759	4,90,681	...	...	4,02,759	4,90,681
III. Salt	1,15,78,575	1,23,65,839	...	...	1,15,78,575	1,23,65,839
IV. Stamps	75,50,999	77,94,639	75,50,999	77,94,638	1,51,01,998	1,55,89,277
V. Excise	1,75,59,379	1,86,01,304	1,75,59,379	1,86,01,304	3,51,18,758	3,72,02,608
VII. Customs	79,50,349	1,07,85,575	...	...	79,50,349	1,07,85,575
VIII. Income-tax	20,37,323	30,04,572	20,37,323	30,04,572	40,74,656	60,09,144
IX. Forest	...	...	41,06,838	45,96,126	41,06,838	45,96,126
X. Registration	...	...	23,37,549	24,70,160	23,37,549	24,70,160
XI. Tributes	44,96,520	44,96,519	...	...	44,96,520	44,96,519
XII. Interest	6,55,654	7,15,110	4,52,295	4,82,551	11,07,949	11,97,661
Receipts by Civil Departments.						
XVI-A. Law and Justice—						
A. Courts of Law	...	...	12,00,387	11,38,856	12,00,387	11,38,856
B. Jails	...	...	5,10,531	5,69,398	5,10,531	5,69,398
XVII. Police	...	...	5,06,454	5,19,980	5,06,454	5,19,980
XVIII. Ports and Pilotage	...	...	69	1,313	69	1,313
XIX. Education	...	...	3,09,763	3,54,148	3,09,763	3,54,148
XX-A. Medical	...	...	1,27,918	1,42,073	1,27,918	1,42,073
XX-B. Sanitation	...	...	10,834	17,485	10,834	17,485
XXI-A. Agriculture	...	...	1,70,924	1,98,128	1,70,924	1,98,128
XXI-B. Scientific and Miscellaneous Departments.	...	...	11,13,461	13,85,311	11,13,461	13,85,311
Miscellaneous.						
XXII. Receipts in aid of Superannuation.	1,31,134	1,28,878	1,21,255	1,26,995	2,52,389	2,55,873
XXIII. Stationery and Printing ...	19,272	18,282	1,24,084	1,22,982	1,43,356	1,41,264
XXV. Miscellaneous	64,607	69,231	3,59,256	3,43,095	4,23,863	4,12,326
XXVI. State Railways (gross receipts).	7,66,85,308	8,48,04,224	...	...	7,66,85,308	8,48,04,224
State Railways (working expenses).	4,35,33,215	4,86,06,744	...	...	4,35,33,215	4,86,06,744
Net Receipts	3,31,52,093	3,61,97,480	...	...	3,31,52,093	3,61,97,480
XXVIII. Subsidized Companies—Repayment of advance of interest.	1,32,862	2,44,350	...	...	1,32,862	2,44,350
Revenue from Productive Public Works.						
XXIX. Irrigation—Major Works—						
Direct Receipts	1,47,184	1,55,768	1,47,184	1,55,769	2,94,368	3,11,537
XXX. Minor Works and Navigation in charge of—						
Civil Officers	...	...	24,239	26,111	24,239	26,111
Public Works Officers ...	...	...	2,35,267	2,53,379	2,35,267	2,53,379
XXXI. Civil Works in charge of—						
Civil Officers	...	...	1,70,447	1,10,477	1,70,447	1,10,477
Public Works Officers ...	3,182	3,764	4,32,168	4,02,520	4,35,350	4,06,284
Total ...	12,07,78,828	13,05,80,344	7,45,05,560	7,78,25,783	19,52,84,388	20,84,06,127
Transfers between Imperial and Provincial Revenues.	— 22,64,802	— 16,34,309	+ 22,64,802	+ 16,34,309	...	...
Grand Total ...	11,85,14,026	12,89,46,035	7,67,70,362	7,94,60,092	19,52,84,388	20,84,06,127

Imperial and Provincial Funds—Charges.

Heads of Account.	Imperial.		Provincial.		Total.	
	1915-16.	1916-17.	1915-16.	1916-17.	1915-16.	1916-17.
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.
1. Refunds and drawbacks	4,07,956	5,05,809	2,40,209	2,68,774	6,48,165	7,74,583
2. Assignments and compensations ...	10,32,148	10,05,468	3,09,736	2,97,709	13,41,884	13,03,177
3. Land Revenue	...	...	1,23,55,014	1,22,76,136	1,23,55,014	1,22,76,136
5. Salt	15,79,370	17,86,342	...	...	15,79,370	17,86,342
6. Stamps	2,06,948	2,23,185	2,06,949	2,23,184	4,13,897	4,46,369
7. Excise	9,26,243	9,04,026	9,26,244	9,04,026	18,52,4 7	18,16 052
9. Customs	4,19,599	4,30,734	...	...	4,19,599	4,30,734
10. Income-tax	30,280	33,079	30,2 1	33,040	60,561	66,159
11. Forest	...	...	29,27,318	23,42,678	29,27,318	23,42,678
12. Registration	...	...	12,56,016	13,12,200	12,56,016	13,12,200
13. Interest	...	...	3,31,295	3,2 4,4 6	3,31,295	3,2 4,486
14. Interest on other obligations ...	1,90,874	2,22,248	...	...	1,90,874	2,22,248
18. General administration	5,07,690	5,33,273	15,50,732	15,15,332	20,5 ,422	20,48,610
19. Law and Justice						
A. Courts of Law	...	...	84,47,568	85,47,081	84,47,563	85,47,081
B. Jails	...	...	15,27,715	15,62,303	15,27,715	15,62,308
20. Police	...	...	1,10,09,893	1,14,73,7 9	1,10,09,893	1,14,73 7 9
21. Ports and Pilotage	...	...	47,020	37,017	47,020	37,017
22. Education	...	...	76,96,650	83,14,875	76,96,650	83,14,875
23. Ecclesiastical	3,50,120	3,26,854	...	...	3,50,120	3 26,854
24.-A. Medical	...	...	16,76,621	17,97,907	16,76,621	17,97,907
24.-B. Sanitation	...	...	33 51,418	17,04,907	33,51,418	17,04,907
25. Political	46,919	53,186	85,757	91,967	1,32,676	1,45,153
26-A. Agriculture...	...	...	11 21,167	12,17,766	11,21,167	12,17,766
26-B. Scientific, etc., Departments ...	...	...	10,27,401	12,29,231	10,27,401	12,29,231
27. Territorial and political pensions ...	3,09,757	3,03,126	...	...	3,09,757	3,03,126
28. Civil furlough and absentee allowances.	5,426	7,229	...	...	5,426	7,229
29. Superannuation and retired allowances.	26,592	25,842	33,08,215	33,22,644	33,34,807	33,48,486
30. Stationery and printing	4,82,836	3,99,676	14,84,731	12,91,826	19,67,567	16,91,502
32. Miscellaneous	76,931	76,396	4,72,977	4,29,195	5,49,953	5,05,591
33. Famine relief ... { Civil Officers ...	...	...	...	...	...	...
{ P.W. Officers ...	...	6,841	...	...	...	6,841
34. Construction of protective railways.	2,897	7,146	...	...	— 2,897	— 7,146
35. Do. irrigation works ...	3,84,033	2,70,292	...	...	3,84,038	2,70,292
36. Reduction or avoidance of debt ...	...	...	2,50,000	2,50,000	2,50,000	2,50,000
37. Guaranteed companies	...	...	...	...	...	...
40. Subsidised companies	3,09,993	5,230	...	...	3,09,993	5,230
41. Miscellaneous railway expenditure ...	37,574	1,15,089	...	...	37,574	1,15,089
42. Irrigation (major works)—						
Public Works Officers (Working expenses).	11,18,184	9,86,600	11,18,184	9,86,600	22,36,368	19,73,200
Public Works Officers (Interest on debt).	15,07,467	14,47,761	15,07,467	14,47,761	30,14,934	28,95,522
43. Irrigation (minor works)—						
In charge of Public Works Officers.	...	...	32,22,985	29,53,348	32,22,985	29,53,348
Do. Civil Officers	...	...	5,94,064	6,17,476	5,94,064	6,17,476
45. Civil works						
In charge of Public Works Officers.	3,51,803	1,26,263	63,58,209	59,64,802	67,10,012	60,91,065
Do. Civil Officers	...	...	23,42,357	20,06,662	23,42,357	20,06,662
Total expenditure charged to Revenue ...	1,03,05,901	97,96,408	7,67,84,198	7,52,52,817	8,70,90,099	8,50,49,225
Surplus (+) or Deficit (—)	+ 10,82,08,125	+ 11,91,49,627	— 13,836	+ 42,07,275	+ 10,81,94,289	+ 12,33,56,902
Grand Total ...	11,85,14,026	12,89,46,035	7,67,70,362	7,94,60,092	19,52,8 4,3 8	20,84,06,127
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.						
48. State Railways	20,72,905	— 11,14,770	...	...	20,72,905	— 11,14,770
49. Irrigation works	7,50,444	6,07,438	...	...	7,50,444	6,07,438
Total, Capital outlay ...	28,23,349	— 5,07,332	...	...	28,23,349	— 5,07,332
Grand Total (Disbursements) ...	1,31,29,250	92,89,076	7,67,84,198	7,52,52,817	8,99,13,448	8,45,41,893

Including the receipts and charges of the Civil and Public Works Departments, but excluding the figures relating to the Army, the Post Office and Telegraph Department, and the Home Accounts, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 20,84,06,127 and was more than that of the previous year by Rs. 1,31,21,739 ; the gross expenditure charged to Revenue fell by Rs. 20,40,874 from Rs. 8,70,90,099 to Rs. 8,50,49,225 ; these figures are, however, subject to alteration until the Finance and Revenue Accounts of the Government of India are finally made up by the Comptroller-General.

Surplus Revenue.

318. The surplus amounted to Rs. 12,33,56,902 and was more than that of 1915–16 by Rs. 1,51,62,613, this being due to an increase of revenue by Rs. 1,31,21,739 and a decrease in expenditure by Rs. 20,40,874. The improvement in revenue was mainly under net State Railway receipts (Rs. 30,45,387), Salt (Rs. 12,87,264), Stamps (Rs. 4,87,279), Excise (Rs. 20,83,850), Customs (Rs. 28,35,226), Income-tax (Rs. 19,34,488), and

Forests (Rs. 4,89,288); while the decrease in expenditure was mainly under Sanitation (Rs. 16,46,511), expenditure on land acquired for subsidized Railway Companies (Rs. 3,04,763) and Civil Works (Rs. 9,54,642), counterbalanced by larger expenditure under Police (Rs. 4,63,891) and Education (Rs. 6,18,225).

Cash Balances.

319. The year opened with a cash balance of Rs. 391 lakhs held in the reserve treasury, the revenue treasuries and the Bank of Madras and its branches; the closing balance was Rs. 347 lakhs.

(*b*) IMPERIAL REVENUE AND FINANCE.

General.

320. The receipts on account of Imperial Revenue exceeded those of 1915–16 by Rs. 1,04,32,009, of which Rs. 30,45,387 were under State Railways, Rs. 28,35,226 under Customs, Rs. 12,87,264 under Salt, Rs. 10,41,925 under Excise and Rs. 9,67,244 under Income-tax. The net transfer from Imperial to Provincial Revenues was Rs. 6,30,493 less than in the previous year. The Imperial expenditure charged to Revenue was also less than that of 1915–16 by Rs. 5,09,493. The incidence of taxation per head of population was Rs. 3–10–9·7 against Rs. 3–6–7·7 in 1915–16.

Land Revenue.*

321. The receipts from Land Revenue amounted to Rs. 3,50,08,412 and were higher than those of 1915–16 by Rs. 1,11,481. The more important variations in the district collections were increases in the districts of Gōdāvari (+ Rs. 1·37 lakhs), Anantapur (+ Rs. ·81 lakh), Chittoor (+ Rs. ·37 lakh) and Nellore (+ Rs. ·32 lakh) and decreases in the districts of South Arcot (— Rs. 1·12 lakhs), Kurnool (— Rs. ·39 lakh) and Vizagapatam (— Rs. ·34 lakh). The improvement in Gōdāvari was chiefly due to the levy of penal assessment from the Raja of Vizianagram on the Sanapalli Lanka suit lands, while that in other districts was due mainly to the more favourable character of the season. The fall in South Arcot was due to the suspension of kists in the Tindivanam taluk, to smaller collections of water-rate owing to breaches in the irrigation sources caused by the cyclone of November 1916, and to difficulty in collection due to the tightness of the money market. Remissions granted on account of flood damages and a fall in tirvajasti under the Kurnool-Cuddapah canal explain the decrease in the Kurnool district. The fall in Vizagapatam is merely the result of ordinary fluctuations in arrear demands and in collections. It may be mentioned here that, pending settlement of the amount due, no recovery was made from the Mysore Darbar during the year on account of the power taken from the Cauvery falls. The incidence of taxation per head amounted to Rs. 1–11–1 as against Rs. 1–10–11 in 1915–16, and was highest in the district of Kistna and lowest in Vizagapatam. The expenditure under Land Revenue being entirely provincial is dealt with in the provincial section.

Customs.

322. The revenue under this head is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs, exclusive of import duty on salt which was credited to Salt, amounted to Rs. 1,05,46,721 against Rs. 76,72,441 in the foregoing year. The increase, which occurred almost wholly under import duty (Rs. 27·54 lakhs), was the result partly of the enhanced rates of duty leviable under the revised tariff of March 1916, and partly of high prices of articles. The receipts under Land Customs amounted to Rs. 2,38,854 against Rs. 2,77,908 in 1915–16. The incidence of taxation per head of population was As. 4–2 against As. 3–1 in 1915–16. The charges amounted to Rs. 4,30,734 against Rs. 4,19,599 in the previous year.

Opium.*

323. Bengal opium is supplied for consumption in this Presidency from the Government store-house at Ghazipur at a standard rate equal approximately to the cost price per seer. The value at this rate is

* The receipts from LAND REVENUE and the receipts and charges under STAMPS, EXCISE (including the realizations of opium revenue by the Excise Department) and INCOME-TAX are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share though in the last report the two were clubbed together. But the incidence of taxation has been calculated with reference to the total receipts.

credited to "Opium" and the difference between this value and the value according to the issue price is credited to "Excise" as "Gain on sale-proceeds of excise opium." Owing to an increase in recent years in the prices paid to cultivators for crude opium and to a rise in the charges of manufacture, the standard rate of cost price was raised by the Government of India from Rs. 8-8-0 to Rs. 11 per seer with effect from 1st April 1916; the issue price which is fixed locally was also correspondingly raised. This accounts mainly for the increase of the revenue credited to opium from Rs. 4,02,759 in 1915-16 to Rs. 4,90,681 in 1916-17. The gain on sale-proceeds amounted to Rs. 6,65,816 against Rs. 7,01,611 in the previous year, the decrease being due to a fall in the quantity of opium issued. The shop rentals and miscellaneous revenue credited to "Excise" rose, however, from Rs. 3,54,360 to Rs. 4,06,808. The total opium revenue thus realized by the Excise department amounted to Rs. 15,63,305 against Rs. 14,58,730 in the previous year and the incidence of taxation per head of population was 9·8 pies as in 1915-16. The charges were Rs. 2,929 against Rs. 1,537 in the previous year.

Salt.

324. The opening of the Levingepuram monopoly extension and of the Veppolodai factory raised the number of Government and Excise factories by one in each case to 20 and 45, respectively. There was, however, no manufacture in the Pandraka factory, as in the previous year. The seasons of 1913, 1914 and 1915 were very unfavourable in the north and centre of the Presidency and the average outturn of these years was 9,009,246 maunds against 13,186,465 maunds manufactured in 1912. The season of 1916 was, however, somewhat more favourable and, aided by an increase in acreage, gave an output of 13,096,241 maunds of which 5,057,477 maunds were Government salt and 8,038,764 maunds were excise salt against 3,652,166 maunds and 5,758,862 maunds respectively in the previous year. This increased output would have produced a marked improvement in the stock on hand at the close of the year as compared with the previous year but for the smaller imports and larger issues made during the year owing to a bad season in Bombay and to increased demands arising out of the war. The quantity of duty-paid salt imported by sea from the Bombay Presidency fell from 1,536,569 maunds to 1,400,063 maunds, and that imported by rail from Bombay and Goa fell from 627,113 maunds to 472,245 maunds. The quantity of duty-bearing salt imported chiefly from the United Kingdom by sea was 4,580 maunds against 2,823 maunds in the previous year. The issues for home and inland consumption of salt locally manufactured and imported by sea and rail rose from 11,346,427 maunds in 1915-16 to 12,596,982 maunds in 1916-17. 511,926 maunds were issued for export by sea to Calcutta and Rangoon. The quantities issued to the French and Ceylon Governments and to the Travancore and the Cochin darbars were 73,316, 26,000, 63,000 and 39,682 maunds respectively. The available stock of Government and Excise salt at the end of the year was 4,557,054 maunds against 3,652,668 maunds in the previous year. The year's revenue amounted to Rs. 1,28,65,839 against Rs. 1,15,78,575 in 1915-16. The increase occurred mainly under Excise duty and was due to the enhanced rate of duty and to increase in sales. The incidence of taxation was As. 4-10·3 as against As. 3-8 in the previous year. The charges increased from Rs. 15,79,370 to Rs. 17,86,342, the increase occurring chiefly under "Salt purchase and freight" owing to larger production of Salt and to the execution of works in connexion with the extension of Salt manufacture.

Excise* (Abkari).

325. The Excise revenue amounted to Rs. 1,75,28,680 against Rs. 1,65,03,408 in 1915-16. The improvement was mainly under country spirits and toddy resulting from an increase in consumption. The incidence of taxation per head was As. 13-6·6 against As. 12-9 in the previous year. The charges declined however from Rs. 9,24,706 to Rs. 9,05,097.

* Vide footnote on page 86.

Stamps.*

326. The revenue rose from Rs. 75,50,999 to Rs. 77,94,639 owing to the growth of litigation, the general development of business, and an expansion in monetary transactions and investments in landed property. The incidence of taxation per head rose to As. 6-0·2 from As. 5-10 and the charges to Rs. 2,23,185 from Rs. 2,06,948.

Income-tax.*

327. The receipts amounted to Rs. 30,04,572 as against Rs. 20,37,328 in the previous year. The increase was mainly due to the enhanced rates of tax introduced from 1st April 1916. The incidence of taxation was As. 2-3·8 per head as against As. 1-6·9 in the previous year. The charges were Rs. 33,079 as against Rs. 30,280 in 1915-16.

Other Imperial receipts.

328. Imperial revenue from other sources amounted to Rs. 4,20,29,322 and exceeded the corresponding revenue of 1915-16 by Rs. 32,26,814, the excess consisting chiefly of Rs. 30,45,387 in the net State Railway receipts and Rs. 1,11,488 under Subsidized Companies on account of repayment of advance of interest. Larger traffic receipts counterbalanced by increases in the cost of rolling-stock and in the share of surplus profits paid to Railway Companies and Native States account mainly for the excess under State Railway receipts.

Transfers between Imperial and Provincial.

329. The decrease in the net transfer to Provincial revenues was chiefly due to the assignment of Rs. 6,43,000 made from Provincial to Imperial revenues in order to enable the latter to obtain the full benefit of the enhancement of taxation made under Income-tax and Excise.

Other Imperial expenditure.

330. The remaining Imperial expenditure amounted to Rs. 64,15,042 and was less than that of the preceding year by Rs. 7,28,419. The decrease was chiefly under Subsidized Companies (Rs. 3·05 lakhs), Civil Works in charge of Public Works Officers (Rs. 2·26 lakhs), Working expenses of Major Irrigation Works (Rs. 1·31 lakhs), Protective Irrigation Works (Rs. 1·14 lakhs) and Stationery and Printing (Rs. ·83 lakh), partly counterbalanced by increases under Refunds and Drawbacks (Rs. ·98 lakh) and Miscellaneous Railway expenditure (Rs. ·78 lakh). The decrease under Subsidized Companies was due to heavy land acquisition charges having been incurred in 1915-16 in connexion with the Tinnevelly-Tiruchendūr and Sūramangalam-Salem Railways; under Civil Works in charge of Public Works Officers mainly to the inclusion in the actuals of 1915-16 of Rs. 1·82 lakhs paid for an additional site acquired for the new Currency Office; under Working Expenses of Major Irrigation Works chiefly to slow progress of work in the first half-year in the Gōdāvari and Kistna delta systems owing to abnormal rains and to credit taken under this head for the value of a river steamer and certain barges made over by the Public Works Department to the Military Department; under Protective Irrigation Works to the progress of the Mopad project having been retarded by frequent rains; and under Stationery and Printing to less expenditure on the purchase of stationery for Central Stores, owing to delay in the supply of paper ordered from Calcutta. The increase under Refunds and Drawbacks occurred chiefly under Customs refunds owing to the levy of provisional duty on certain classes of consignments subject to refund on the result of tests.

Capital outlay on State Railways and Irrigation Works not charged to Revenue.

331. The capital outlay on irrigation works not charged to Revenue amounted to Rs. 6,07,438 against Rs. 7,50,444 in 1915-16; that on State Railways was *minus* Rs. 11,14,770 against Rs. 20.72,905, the former figure being mainly the net result of an advance of Rs. 6 lakhs made to the Tinnevelly-Tiruchendūr Railway and a *minus* outlay of Rs. 18 lakhs under South Indian Railway. The expenditure of this Railway charged to final heads was Rs. 8 lakhs as compared with Rs. 21 lakhs in the previous year and the decrease occurred chiefly under rolling-stock. On the other hand, there was a net credit of Rs. 26 lakhs under Suspense Accounts as against a net debit of Rs. 1 lakh in the preceding year. The net credit occurred for the most part under Stores owing to the charging off under the sanction

* Vide footnote on page 86.

of the Railway Board of 11 "K" class engines, 18 timber trucks and materials for 21 mile renewals, to the restriction of purchases both in England and India and the consequent employment of all available materials in stock and to a large sale of stores to the Public Works, Military and other departments.

Imperial Loans.

332. The opening balance on 1st April 1916 was Rs. 1,74,84,941. Rs. 11 lakhs were advanced during the year to the Madras Port Trust, Rs. 8 lakhs being in connexion with improvements to the harbour and Rs. 3 lakhs being for repairs to the breakwater wrecked by the cyclone of November 1916. The repayments amounted to Rs. 13,14,918 ; the chief items were Rs. 38,846 by the Madras Corporation, Rs. 2,00,429 by the Madras Port Trust, Rs. 26,557 by the Madras Coast Lights Fund, Rs. 10 lakhs by the Bank of Madras and Rs. 35,247 by the Tanjore District Board Railway. The closing balance of the year was Rs. 1,72,70,023. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year, viz., Rs. 28,600, was duly paid. On the 31st March 1917, this sinking fund held Government securities of the face value of Rs. 13,89,700.

(c) REVENUE AND FINANCE OTHER THAN IMPERIAL.

Provincial Revenues.

333. The Provincial accounts opened with a balance of Rs. 1,10,02,216 on 1st April 1916 and closed with a balance of Rs. 1,52,09,491 on 31st March 1917. The transactions of the year thus yielded a surplus of Rs. 42,07,275 which was the net result of an aggregate revenue of Rs. 7,94,60,092 and an expenditure of Rs. 7,52,52,817.

Land Revenue.*

334. The receipts from Land Revenue amounted to Rs. 3,50,08,412 and were higher than those of 1915–16 by Rs. 1,11,481. The more important variations in district collections are explained in the Imperial section. The charges were Rs. 1,22,76,136 against Rs. 1,23,55,014 in the previous year, the decrease being due chiefly to larger recoveries on account of estate surveys.

Stamps, Excise and Income-tax.*

335. The receipts from Stamps, Excise and Income-tax amounted respectively to Rs. 77,94,638, Rs. 1,86,01,304† and Rs. 30,04,572 against Rs. 75,50,999, Rs. 1,75,59,379 and Rs. 20,37,328 in the previous year. Explanations of the increases are given in the Imperial section. The corresponding charges were Rs. 2,23,184, Rs. 9,08,026‡ and Rs. 33,080 as against Rs. 2,06,949, Rs. 9,26,244 and Rs. 30,281, respectively, in the previous year.

Forests.

336. Forest revenue amounted to Rs. 45,96,126 against Rs. 41,06,838 in the previous year. The improvement, which occurred mostly under timber and other produce removed from the forests by consumers or purchasers, was due chiefly to better prices fetched by fuel coupes, to the leasing of a greater area of forests, to sales of trees blown down by the cyclone and of forest lands in certain districts, and to larger revenue derived from rela and tangedu barks and from mica. The expenditure amounted to Rs. 28,42,678 and it was Rs. 87,209 more than that of the previous year, after excluding from the latter a special payment of Rs. 1,71,849 made for the acquisition of Mudimalai and Komborakolli forests in the Nilgiris. The increase was, for the most part, under roads and bridges and under temporary establishment, owing, in the former case, chiefly to the construction of a ghaut road in the North Arcot district.

Registration.

337. The receipts under Registration were Rs. 24,70,160 against Rs. 23,37,549 in the preceding year. The charges amounted to Rs. 13,12,200 or Rs. 56,184 more than in the foregoing year, the increase being mainly due to the raising of the minimum pay of clerks in registration offices to Rs. 20 per mensem with effect from 1st June 1916.

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* The receipts from LAND REVENUE and the receipts and charges under STAMPS, EXCISE (including the realizations of opium revenue by the Excise Department) and INCOME-TAX are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share. But the incidence of taxation has been calculated with reference to the total receipts and is mentioned in the Imperial section.

† Includes share of opium revenue credited to this head.

‡ Includes expenditure relating to opium charged to this head.

Canal Revenue.

338. The Canal Revenue collected during the year amounted to Rs. 2,47,478 and was Rs. 12,699 more than in the previous year.

Other Provincial receipts.

339. The Provincial receipts under the remaining heads amounted to Rs. 63,50,571* and were higher than those of the previous year by Rs. 3,34,035. There were increases under thirteen heads (+ Rs. 5,02,447) and decreases under five heads (— Rs. 1,68,412); the former were chiefly under Scientific and Miscellaneous Departments (+ Rs. 2·72 lakhs), Jails (+ Rs. ·59 lakh) and Education (+ Rs. ·44 lakh), and the latter under Courts of Law (— Rs. ·62 lakh) and Civil Works in charge of Civil Officers (— Rs. ·60 lakh). The increase under Scientific and Miscellaneous Departments occurred mainly under Cinchona plantations (+ Rs. 2·07 lakhs) and under Fishery receipts (+ Rs. ·54 lakh). Smaller receipts under general fees, fines and forfeitures (chiefly Translation and Printing fees) and variations in the amounts of unexpended balances of Provincial contibutions refunded by local bodies account for the decreases under Courts of Law and Civil Works in charge of Civil Officers.

Other Provincial expenditure.

340. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 5,76,57,513 and was less than that of the previous year by Rs. 14,24,863 which was the net result of decreases under twelve heads (— Rs. 31,33,466) and increases under eleven heads (+ Rs. 17,08,603). The decreases were chiefly under Sanitation (— Rs. 16·47 lakhs). Civil Works in charge of Public Works Officers (— Rs. 3·93 lakhs) and Civil Officers (— Rs. 3·36 lakhs), Minor Irrigation Works in charge of Public Works Officers (— Rs. 2·69 lakhs), Stationery and Printing (— Rs. 1·93 lakhs) and Working Expenses of Major Irrigation Works (— Rs. 1·32 lakhs). The variation in the last case has been explained in the Imperial section. The falling off under Sanitation which forms the bulk of the total decrease was under grants for sanitary purposes. Smaller expenditure on civil buildings, chiefly police buildings, and on grants to local bodies for the construction of roads, bridges, etc., caused the decrease under Civil Works. That under Minor Irrigation Works in charge of Public Works Officers occurred chiefly under the Panjampatti Reservoir project and under Tank Restoration repairs. The reduction in the expenditure under Stationery and Printing was mainly the result of the economies enforced in the use of stationery in Government offices in view of the war conditions. The more important increases were under Education (+ Rs. 6·18 lakhs), Police (+ Rs. 4·64 lakhs), Scientific and Miscellaneous Departments (+ Rs. 2·02 lakhs) and Medical (+ Rs. 1·21 lakhs). Larger payments of subsidies in support of Local Board and Municipal Schools (+ Rs. ·88 lakh), of teaching grants to Elementary Schools (+ Rs. 1·44 lakhs), and of building and hostel grants to Non-European Schools (+ Rs. 2·07 lakhs) account in a large measure for the increase under Education. Under Police, the increase occurred almost wholly under district executive force (+ Rs. 4·53 lakhs) and was mainly due to the revision of the pay of the constabulary. The increase under Scientific and Miscellaneous Departments was chiefly under Cinchona plantations and under Fishery Bureau charges. That under Medical was, for the most part, due to the revision of the pay of Civil Assistant Surgeons and to the opening of the Rayapuram Hospital and the Medical School at Calicut.

Provincial loans.

341. The Provincial advance and loan account (including loans to local bodies for railway construction) opened with a balance of Rs. 94,76,881 on 1st April 1916 and closed with a balance of Rs. 94,55,363 on 31st March 1917; advances amounted to Rs. 10,14,901 and repayments to Rs. 10,36,419. Ryots received advances to the extent of Rs. 7,16,309 as against Rs. 7,69,620 in the previous year. The District Boards of Madura and Coimbatore took advances of Rs. 50,150 and Rs. 5,438, respectively, for the construction of bridges. Rs. 18,350 and Rs. 70,670 were advanced to the Negapatam and Tirupati Municipal Councils respectively, for improvements to water-works; and Rs. 9,500, Rs. 3,000 and Rs. 10,000, respectively,

* This excludes the net amount transferred from Imperial to Provincial which has been dealt with in the Imperial section.

to the Anakāpalle, Parlākimedi and Vizagapatam Municipal Councils for town survey. The Salem municipality borrowed Rs. 28,000 in connexion with the Hastampati extension scheme; the Vellore municipality Rs. 29,600 for drainage works; and the Erode municipality Rs. 47,000 for water-supply. The Zamindar of Punganūr received an advance of Rs. 13,000 to complete the survey of his estate. A loan of Rs. 12,000 was granted to the Uralan (guardian) of the Tirukaliyur Devaswam in the Malabar district for urgent repairs to the Tirukaliyur temple, according to the terms of the agreement under which the Devaswam's forests in the Nilambūr valley have been leased to Government. No loans were granted to co-operative credit societies during the year.

Local Funds.

342. The following paragraphs deal with funds raised from special sources and devoted to special objects and not to general purposes of the administration (Imperial and Provincial). The funds comprised under the head "Local Funds" are local funds constituted under Act V of 1884, the Irrigation Cess fund, Port and Marine funds, and other funds which are mentioned below seriatim.

Local Funds Act V of 1884.

343. The local funds constituted under Act V of 1884 opened with a balance of Rs. 78,32,488 and closed with a balance of Rs. 80,98,050. Exclusive of debt head transactions, the receipts and charges amounted to Rs. 1,79,74,070 and Rs. 1,89,13,272, showing a deficit of Rs. 9,39,202 against a deficit of Rs. 16,84,587 in the preceding year. The chief factor in the improvement in 1916–17 was a smaller outlay on Civil Works (— Rs. 18·71 lakhs) partly counterbalanced by larger expenditure on railway construction (+ Rs. 8·53 lakhs). The receipts and charges on account of debt head transactions amounted to Rs. 50,83,780 and Rs. 38,79,016. The Salem, Tanjore, Guntūr and Tinnevelly District Boards obtained loans from the Bank of Madras on the security of their Government promissory notes of Rs. 1·6 lakhs, Rs. 4·88 lakhs, Rs. 2·38 lakhs and Rs. 5·62 lakhs, respectively, for railway construction. For the same purpose, the District Board of Tinnevelly took a loan of Rs. 6 lakhs from the District Board, Tanjore. A loan of Rs. 1·04 lakhs obtained from the Bank of Madras on the security of Government paper by the Chingleput District Board to meet its liabilities was repaid before the close of the year. The funded capital of the district boards, which was Rs. 1,26,93,000 on 31st March 1916, rose to Rs. 1,35,11,000, of which Rs. 1,06,50,000 represented investments of railway cess balances and the balance of Rs. 28,61,000 investments on account of endowments, provident funds and other institutions. The closing cash balance of the local boards was ear-marked as follows: railway cess fund (Rs. 11·1 lakhs), endowment fund (Rs. 4·16 lakhs), unexpended amount of Provincial grants (Rs. 24·33 lakhs) and debt heads (Rs. 20·09 lakhs). Thus, the net balance available for general purposes of the district funds was Rs. 21·30 lakhs and the South Arcot, Madura and Nellore boards closed with deficit cash balances under general funds.

Bhadrāchalam Estate Village Service Fund.

344. The receipts of this fund consisted mainly of the payments made by the proprietors and of the deductions made from the land revenue collections (beriz) of Government villages, no cess being levied from the proprietors on account of the emoluments of village servants. The receipts and charges of the fund amounted to Rs. 9,458 and Rs. 8,455, respectively, against Rs. 9,124 and Rs. 7,234 in the previous year, and the fund closed with a credit balance of Rs. 16,549.

Irrigation Cess Fund.

345. This fund exists in the districts of Chingleput, Trichinopoly, Madura and Coimbatore. The fund opened with a balance of Rs. 1,02,037 and closed with a balance of Rs. 99,891. The receipts and charges amounted to Rs. 42,831 and Rs. 44,977, respectively, against Rs. 46,311 and Rs. 42,635 in the previous year. The unspent balance of the Irrigation Cess Fund of the South Arcot district, which was abolished in 1915–16, was transferred to the credit of the Public Works Department in 1916–17 for expenditure on clearance of silt in the Tiruvadi and Wallajah channels, this being the object for which the cess was levied.

Port and Marine Funds.

The Madras Port Fund.

346. These funds consist of Port Funds (Act XV of 1908), Pilotage Funds (outports), Landing and Shipping Funds, and the Madras Coast Lights Fund. The Port Funds are again subdivided into Madras and Minor Ports Funds. The Madras Port Fund opened with a balance of Rs. 5,584 and closed with a balance of Rs. 15,348 ; receipts improved owing to the levy of enhanced port dues, and charges fell off owing chiefly to the absence of expenditure on buoys and beacons. The income of the fund amounted to Rs. 97,666 and its expenditure to Rs. 87,902.

The Minor Ports Fund.

The Minor Ports Fund opened with a balance of Rs. 1,83,114 and closed with a balance of Rs. 1,70,880 ; the receipts and charges amounted to Rs. 6,77,706 and Rs. 6,89,940, respectively. The fund advanced a loan of Rs. 86,435 to the Tellicherry Landing and Shipping Fund. Rs. 27,156 in all were repaid towards the principal of the loans taken by the Tuticorin, Cocanada, Calicut, Negapatam and Cochin Landing and Shipping Funds. Free grants to the extent of Rs. 2,35,637 were also made to the Cocanada, Tuticorin, Adirāmpatnam, Cochin and Tellicherry Landing and Shipping Funds. The security balance at the credit of the fund was Rs. 8,57,400 (face value).

Pilotage Funds (outports).

The income and expenditure of the Pilotage Funds (outports) amounted to Rs. 11,364 and Rs. 10,434, respectively. The opening and closing balances were Rs. 2,573 and Rs. 3,503. The invested balance of the funds was Rs. 1,72,500 (face value).

Landing and Shipping Funds.

The opening balance of the Landing and Shipping Funds amounted to Rs. 2,76,317 ; the receipts and charges to Rs. 6,69,785 and Rs. 5,68,160, respectively, and the closing balance to Rs. 3,77,942. The invested balance to the credit of the funds was Rs. 3,35,900 (face value). The balance of loans repayable by the Landing and Shipping Funds to the Minor Ports Fund amounted to Rs. 5,83,523.

The Madras Coast Lights Fund.

347. The Madras Coast Lights Fund opened with a balance of Rs. 16,853 and closed with a balance of Rs. 31,224 ; the receipts and charges of the year were Rs. 1,31,682 and Rs. 1,17,311. The face value of the fund's investments was Rs. 50,000.

Cantonment Funds.

348. The receipts and charges of these funds amounted to Rs. 5,62,654 and Rs. 5,51,598, respectively, the result being a surplus of Rs. 11,056, which raised the balance from Rs. 1,05,287 to Rs. 1,16,343.

Cantonment Hospital Fund, Secunderabad.

349. The fund opened with a balance of Rs. 87 and closed with a balance of Rs. 32. The receipts and charges amounted to Rs. 9,880 and Rs. 9,935, respectively.

Civil Hospital Fund, Secunderabad.

350. The opening balance of this fund was Rs. 15,437. The receipts and charges amounted to Rs. 45,669 and Rs. 62,649 respectively. The fund closed with a deficit balance of Rs. 1,543 under general funds which was made good in April 1917 by a contribution received from the Secunderabad Local Abkāri Fund.

University Fee Fund.

351. The opening and closing balances were Rs. 53,435 and Rs. 54,501 respectively. The receipts and charges amounted to Rs. 5,01,721 and Rs. 5,00,655. The invested balance (Rs. 6·8 lakhs) was unaltered and the total held in fixed deposit with the Bank of Madras was Rs. 3,05,000.

Kumbakōnam College Hostel Fund.

352. The receipts and charges amounted to Rs. 6,169 and Rs. 6,263 and the cash balance to the credit of the fund was reduced to Rs. 808.

Mrs. A. V. Narasinga Rao's College Fund.

353. The opening and closing balances were Rs. 71,202 and Rs. 57,601. The receipts and charges amounted to Rs. 35,451 and Rs. 49,052, respectively. There was an invested balance of one lakh.

Vizagapatam Hospital Fund.

354. The Vizagapatam Hospital Fund opened with a balance of Rupees 2,596. The receipts and charges were Rs. 17,242 and Rs. 16,584 and the closing balance was Rs. 3,254.

Hyderabad Residency Bazaar Fund.

355. The receipts and charges of the Hyderabad Residency Bazaar Fund amounted to Rs. 1,18,999 and Rs. 1,01,322, and the balance was thus raised from Rs. 1,41,753 to Rs. 1,59,430.

Secunderabad Local (Abkāri) Fund.

356. The opening balance was Rs. 5,03,802. The receipts and expenditure were Rs. 8,39,582 and Rs. 10,20,798 thus reducing the closing balance to Rs. 3,22,586.

MUNICIPAL REVENUES.

357. The receipts and charges of mufassal municipalities amounted to Rs. 86,23,102 and Rs. 92,74,441, respectively, and the balance at their credit fell from Rs. 39,39,875 to Rs. 33,98,057. The receipts of the Madras Corporation amounted to Rs. 46·46 lakhs and the charges to Rs. 46·34 lakhs. The balance at the credit of the Corporation at the end of the year rose from Rs. 9·28 lakhs to Rs. 9·40 lakhs.

EXCISE ADMINISTRATION.

[*Report on the Administration of the Abkāri Revenue for 1916–17.*]

General.

358. The only administrative change of importance made during the year was the final withdrawal of the rules requiring licensing of trees tapped for sweet juice in the districts of Malabar and South Kanara. These rules had long been the subject of criticism on account of the interference they involved with the jaggery industry and the work they imposed on the department and, after various attempts to modify them, it was finally decided to withdraw them altogether from these districts from 1st October 1916. The following minor changes may also be mentioned : the enhancement of the duty on country spirits from Rs. 8–2–0 to Rs. 8–12–0 per proof gallon in Madras and the adjoining villages ; the raising of the tree-tax in four districts ; the grant of permission in the Tinnevelly subdivision to holders of shops supplied by palmyras, which ordinarily yield only till July, to supplement their supplies by tapping trees which throw out hot weather spathes in August and September, on payment of half the rate of tree-tax ; the removal of the duty of 7½ per cent *ad valorem* on the local manufacture of denatured spirits from 19th January 1917, the tariff rate on import remaining ; the enhancement of the issue price of opium from Rs. 39 to Rs. 41–8–0 per seer ; and the revision of the rules relating to cocaine and allied drugs, medical and veterinary practitioners and dentists being permitted to possess the drugs without licence up to half an ounce.

Experiments in aid of Temperance.

359. Two experiments were tried during the year : the removal of road-side shops to places where they would not prove a temptation to wayfarers and the establishment of tea and coffee shops as counter-attractions to liquor shops. The former was tried in the North Arcot and Tinnevelly districts. The results were, however, inconclusive owing to difficulties in finding suitable sites and in obtaining relevant statistics. The harm done by the concentration of shops on the road-side is, however, obvious and definite instructions have been issued not to locate arrack and toddy shops, sanctioned to supply the needs of villages, on road-sides where they put temptation in the way of travellers. Tea and coffee shops were opened generally through the agency of local boards or municipalities, sometimes at their own charges, sometimes by toll-gate or market contractors as a term of their contracts. The reports on the experiments were not encouraging. Over thirty shops were opened, but there was no indication that any of them effected a reduction of drunkenness, while all but about three appear to have been conducted at a loss.

Country liquor.

360. The number of shops in the excise tracts was reduced by 205 : the rentals rose from Rs. 44·32 lakhs to Rs. 45·79 lakhs ; and consumption increased by 10·3 per cent to 1,644,466 proof gallons chiefly owing to good agricultural prospects, reviving trade, suppression of illicit distillation and closure of foreign liquor taverns and retail shops. There was a fall in revenue in the non-excise tracts.

Toddy.

361. The number of toddy shops was reduced from 12,447 to 11,851. The rentals rose from Rs. 88·94 lakhs to Rs. 90·98 lakhs and the receipts under tree-tax from Rs. 74·16 lakhs to Rs. 79·75 lakhs. The toddy consumed was calculated to have been roughly 106 million gallons. A cyclone in the Chingleput and South Arcot districts caused so much damage to palm

trees that it was found necessary to make considerable remissions of both tree-tax and shop rentals. The quantity of jaggery exported by sea in 1916–17 from the districts of Gōdāvari and Kistna, where the sweet juice tapping is controlled by licences, was 1,138·35 tons against 1·35 tons in the previous year, the increase being due to large shipments from Gōdāvari to Ceylon.

Foreign Liquor.

362. The quantity of foreign liquor imported by sea during the year amounted to 322,028 gallons, showing a decrease of 24·6 per cent of the previous year's figure : 40·6 per cent of this quantity came under the head "Ale, beer and porter." The increase in the local manufacture of beer more than covered the deficiency in imports under that head. The total issues from the local breweries amounted to 926,326 gallons against 587,464 in 1915–16. Out of this 216,775 gallons were exported, mainly for the use of troops.

Opium and intoxicating drugs.

363. The total issues of opium within the Presidency were 36,468 seers against 37,082 in the previous year : 8,115 seers were issued to Mysore and other States including Coorg and the French Settlements. 658 shops in both the ordinary and Agency tracts were sold or licensed for Rs. 8,10,596 against 697 shops for Rs. 7,06,019 in 1915–16. There was a slight increase in the retail selling price of opium during the year. The quantity of hemp drugs including preparations of hemp consumed increased from 44,722 seers to 47,773 seers, or by about 7 per cent. The main reason given for the increase is the increase in the selling price of opium. The number of retail licences issued was 418 against 451 in 1915–16. There were no shops in the Ganjām Agency and the four allowed in the Gōdāvari Agency were given to selected vendors on payment of fixed fees. The remaining shops were sold in auction for Rs. 5,59,900 against Rs. 5,25,732 in 1915–16. The number of licences for possession and sale of cocaine and allied drugs declined slightly.

Offences.

364. There was a decrease of 4·2 per cent in the number of offences reported against the Abkāri law. The number of cases of illicit manufacture of toddy decreased by 7·5 per cent and those under smuggling by 20·8 per cent, but cases of illicit distillation and possession of illicitly distilled spirits increased by 16·2 per cent owing mainly to the drastic reduction in the number of licences for sale of spirits.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICES.

DETAILS OF CENSUS.

365. *Vide* pages 196 to 205 of the Report on the Administration of the Madras Presidency during the year 1911-12.

BIRTHS AND DEATHS. (1916.)

[*The fifty-third annual report of the Sanitary Commissioner, Madras, 1916; Report on the working of the Births, Deaths and Marriages Registration Act of 1886 in the Madras Presidency during 1916-17; Statistics of British India, Part V, Area, Population and Public Health.*]

Population.

366. The population of the Presidency according to the census of 1911 was 41,829,232 exclusive of Europeans and Eurasians, who numbered 40,928. Vital statistics were returned for a population of 40,005,735, the remainder representing the hill tribes of Ganjām and Vizagapatam and the inhabitants of the Laccadive Islands, of the Banganapalle State and of the Pudukkōttai State. The estimated population of the year 1916 was 43,817,734. The number of emigrants aggregated 356,518 and exceeded that of immigrants by 86,120.

Registration.

367. In rural areas registration of births and deaths is generally optional and this combined with the natural indifference exhibited by the local registering staff gives results which cannot be accepted as quite accurate. Comparatively better results are obtainable in municipalities where registration is compulsory and where there is a special staff employed for the purpose. During the year, the Madras Registration of Births and Deaths Act was in force in only 310 unions and 2,349 villages.

Births.

368. During the year, 1,301,597 births were registered, an increase of 52,163 on the previous year. Calculated upon the census population of 1911 for which returns were received, the birth-rates for 1916 and 1915 stood at 32·5 and 31·2 per mille, respectively; the rate for 1916 showed an increase of 0·6 per mille over the decennial average. Leaving out of account Madras (42·1), the highest birth-rate was recorded in Guntūr (41·0) and the lowest rate in Ramnad (24·0). Compared with the previous year increased birth-rates occurred in all but five districts, the largest increase being in South Arcot (+6·8). Of the five districts (Cuddapah, Kistna, Kurnool, North Arcot and Salem), where there was a decreased birth-rate, Kistna headed the list with a deficiency of 3·1 per mille. The proportion of male to female births was 104·4 to 100; Muhammadans as usual returned the largest birth-rate (36·2) but the increase of the year was shared by all communities. The birth-rates for the year in compulsory and non-compulsory rural areas were 32·8 and 32·0 per mille, respectively. In rural towns the recorded birth-rates of 1916 and 1915 were 27·4 and 24·6 per mille, respectively. The municipal birth-rate was 37·7 per mille, the excess over the rural rate being probably due to better registration.

Deaths.

369. Deaths registered during the year numbered 875,013 against 879,950 in 1915. These figures represent annual ratios of 21·9 and 22·0 per mille against the decennial average of 24·0. Cholera, small-pox, dysentery

and diarrhœa were less severe. The infantile death-rate for the districts was less than that of the previous year and below the quinquennial average, the ratio being 182·8 per mille of births against 186·6 in 1915 and 187·4 for the quinquennium. The rate of mortality among male infants was 192·6 and that among female infants 172·5. The death-rate in rural towns was 19·0 per mille against the quinquennial average of 20·7. In municipalities the death-rates for 1916 and 1915 were 31·3 and 32·3 per mille, respectively, against the quinquennial average of 34·0 per mille. The fall occurred chiefly under cholera, fevers, dysentery and diarrhœa. The highest death-rates were returned by Bellary (60·2), Coimbatore (52·4), Tiruppattūr (49·9), Salem (44·6) and Palni (41·7). The total infantile death-rate for the municipalities averaged 230·9 per mille of registered births.

Chief Diseases.

Cholera.

370. Deaths from cholera fell from 30,098 or 0·8 per mille in 1915 to 16,735 or 0·4 per mille in 1916, against the quinquennial death-rate of 1·4 per mille. The mortality from this disease has been, on the decline for the last few years and particularly so since 1914, a feature attributable to a better knowledge on the part of the public of the accepted preventive measures. The incidence of cholera mortality during 1916 was heaviest in the months of January to April and November and December. From 48 municipal towns 1,269 deaths from cholera were reported against 1,794 in 46 towns in 1915. One additional cholera party was sanctioned by Government during the year to check the spread of cholera in rural tracts, thus bringing the total number of such parties on duty in the Presidency to four. The mortality from cholera in municipal towns which have a protected water-supply has been on the decline year after year.

Small-pox.

Small-pox contributed 21,903 deaths against 24,038 in 1915. The disease was reported from all the districts of the Presidency and was continuously present throughout the year in all of them excepting the Nilgiris. Chingleput and South Arcot returned the highest death-rates of 1·1 and

Plague.

1·0 per mille, respectively. The number of deaths from plague registered was 11,498 against 3,889 in 1915. Eight districts were completely free from the disease; in six others there were in all 21 imported cases; in the remaining 11 the disease was present in an indigenous form. Bellary, Coimbatore and Salem districts had plague death-rates of 1·3, 2·6 and 1·5, respectively. Fifteen municipal towns had indigenous cases, the highest death-rates registered in them being 15·3 per mille in Palni, 12·2 in Coimbatore, 9·6 in Salem and 8·0 in Gudiyāttam.

Fevers.

371. Under fevers a total of 292,491 deaths was registered during the year against 290,228 in 1915. These figures give annual ratios of 7·3 per mille in each year. All cases of malaria are at present brought

Dysentery and diarrhœa.

under "fevers." Dysentery and diarrhœa caused 58,444 deaths against 61,057 in 1915. The largest number of deaths under this head was registered as usual in Madras which had a mortality rate of 7·2 per mille.

Europeans and Eurasians. (1916-17.)

372. The statistics given above do not include Europeans and Eurasians. In this class there were 255 births, 99 in Madras and 156 in the mufassal, and 160 deaths. The drop in the number of births and deaths registered is the result of the instructions issued by the Registrar-General of Births, Deaths and Marriages to the several municipalities to the effect that their returns of births and deaths should include statistics only of persons falling under the category of Europeans and European British subjects, as defined in the Code of Criminal Procedure. The number of licensees under the Indian Christian Marriage Act, 1872, was 704. There was a decrease in the number of marriages contracted by European Christians—448 against 498. There were 857 burials. Fever was the most common cause of death and after that diseases of the heart, diarrhœa and dysentery and pneumonia.

EMIGRATION AND IMMIGRATION. (1916.)

[*G.O. No. 512, Home (Miscellaneous), dated 29th May 1917; Statistics of British India, Part V, Area, Population and Public Health—Emigration.*]

373. Emigration to Trinidad was in operation till the 6th March 1916, and three joint shipments from Calcutta and Madras were made, the number of persons embarked at Madras being 909. Recruitment for Jamaica began on the 7th March and continued till the 14th April 1916. One joint shipment was made, the number of persons embarked at Madras being 258. Emigration for Fiji was in operation between the 20th June and the 9th October 1916, during which period two joint shipments were made, 950 persons being embarked at Madras. Recruitment for British Guiana began on the 10th October 1916 and continued till the end of the year. Two joint shipments were made, the number of persons who left Madras being 387. There was no emigration to Mauritius or the Seychelles. The prescribed proportion of women to men was maintained in respect of all the shipments made during the year. The management of the depots was good and the emigrants were well cared for. 4,007 emigrants returned from Natal, 243 from Fiji and 128 from Mauritius. As in previous years there was no emigration to the French Colonies. **Regulated.**

374. The increase in the number of passengers to the Straits Settlements is attributed to the greater demand for labour in the Malay States, to the regularity of steamer services and to the high price of food-grains. In the case of Burma and Ceylon it is impossible to distinguish emigrants from ordinary passengers. The decrease in the number of passengers to Burma is mainly from the districts of Ganjām, Vizagapatam and Gōdāvari and is ascribed to the favourable character of the season and to the smaller number of vessels available as a result of the war. There was an increase in the number of passengers to Ceylon. **Non-regulated.**

MEDICAL RELIEF. (1916.)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1916; Statistics of British India, Part V, Area, Population and Public Health—Hospitals.*]

375. During the year under review 17 new dispensaries were opened and 10 were re-opened after closure. 15 institutions were closed, 3 of them permanently. There were in all 709 dispensaries and hospitals working in the Presidency at the close of the year, as against 697 at the end of 1915. Of these institutions, 511 were maintained by Local Funds, 54 by private agencies without a grant and 24 with a grant ; 48 were railway hospitals and 43 were for the police ; 17 were public hospitals maintained by the State and the remaining 12 were State institutions maintained by various departments. There are now 7 itinerating dispensaries under sub-assistant surgeons at work in the districts mainly for the purpose of combating malaria. The number of institutions which treat only women and children was 41, of which 4 were opened during 1916 while 3, which were working last year, had to be closed. Among the new institutions opened during the year mention must be made of the King Edward VII Tuberculosis Institute and the new hospital at Salem. For in-door patients, the total number of beds available was 4,486 for males and 3,585 for females. Considerable attention has recently been directed towards the improvement of the medical and surgical care of women, both by increasing the number of female medical practitioners and by creating a class of trained midwives throughout the districts. **Institutions.**

376. The total number of in-and out-patients treated at the public and aided institutions has been steadily increasing and was 7,562,890 in 1916. The number of in-patients was 98,370 against 90,867 in 1915. Of the total number treated 74·12 per cent were Hindus, 12·67 per cent Mussalmans and 0·94 per cent Europeans and Eurasians. As is usual, diseases of the **Relief.** **Diseases.**

skin were the most common complaints, and next came digestive disorders. There has been a steady increase in the number of "eye" cases treated, which was 739,571 in 1916. Admissions from malaria increased to 554,195, but there was a distinct drop in Madras City where anti-malarial work has been extensive. Venereal diseases rose to 115,046 cases, and there was a marked increase in tuberculosis. Very few cholera patients reach the hospitals, but special cholera parties have done good work in checking the disease. The proportion of patients operated on to those treated remained about 4 per cent. Operations for abcesses were the chief variety. Over 47,000 labour cases were conducted. The total death-rate in hospitals was 4·11 per cent as against 4·54 in 1915.

Finance.

377. Rupees 8,68,578 were spent on medical relief in public and aided institutions in Madras. Government contributed Rs. 6,28,184, the Corporation gave Rs. 1,31,105, the public subscribed Rs. 17,898, and the balance accrued from Local Fund contributions and miscellaneous receipts. The expenditure on buildings and repairs was Rs. 82,679, this item being reduced to the barest necessities. There was also a great saving on dietary charges, the daily average for each patient being only As. 5–8 against As. 6–10 in 1915. The total mufassal receipts (exclusive of the opening balance) were Rupees 22,39,876 of which Government contributed Rs. 2,37,604 while Rs. 18,72,500 came from Local and Municipal Funds. The average daily cost of each patient (exclusive of buildings and dietary charges) was As. 3–8 against As. 3–6 in 1915.

Effects of the War.

378. In estimating the success of the year's work it must be borne in mind that all the officers of the Indian Medical Service except sixteen, in addition to 27 assistant surgeons and 76 sub-assistant surgeons, were on military duty. In spite of this fact and notwithstanding financial difficulties, it was possible to increase considerably both the number of institutions and the number of patients relieved, while at the same time there was a pronounced fall in the hospital death-rate. This state of affairs reflects the greatest credit on all grades of the medical services, particularly on the remaining officers of the superior service who have almost all been doing several men's duties, and on the assistant surgeons who have been called on to take charge of important hospitals.

Medical College, Madras. (1916-17.)

379. The eighty-second session of the college began on the 3rd July 1916 and ended on the 31st March 1917. The strength of the college rose from 425 to 448. The increase was due to the rise in the number of admissions to the apothecaries' classes. There were 283 students attending the University classes. The percentage of passes at all the University examinations held in October 1916 and March-April 1917 was 66 as against 60·5 in the previous year. There were only seven students in the Chemist and Druggist class, and most of them were deficient in general education.

Women students.

380. The number of women students during the year has decreased (32 against 36 in 1915–16). Of this number 12 were Europeans or Eurasians, 16 Indian Christians and 4 non-Brahmans. The results attained by the female pupils were satisfactory. During the year the control of the Government grants made hitherto to the Countess of Dufferin's Fund was transferred to the Surgeon-General and the selection of candidates for the award of scholarships has also been transferred to him. It is hoped that candidates will take full advantage of the generous concessions granted by Government for furthering female medical education in this Presidency.

Medical Schools.

381. During the year 1916–17 there were 280, 132, 112 and 25 pupils on the rolls of the four Medical Schools, Royapuram, Tanjore, Vizagapatam and Calicut, against 225, 113 and 96, respectively, in the previous year. The new Medical School at Calicut was opened on 3rd July 1916. Of the above number, 216 were private pupils against 137 in the previous year. The receipts of the three medical schools (the receipts of the Calicut School being nil) amounted for the year to Rs. 10,446 and the expenditure for the four schools to Rs. 90,888 as against Rs. 10,798 and Rs. 73,016,

respectively, during the previous year. An instructor was added to the teaching staff of each of the three medical schools for teaching pathology. Proposals for the enlargement of all the medical schools have been called for by Government. Government have decided to transfer the Calicut school to Coimbatore, where there is a new and up-to-date hospital. Government have also sanctioned the provision of hostel accommodation for 210 more pupils at Royapuram and for about 100 pupils at Rayapettah. An amount of Rs. 65,104 has been sanctioned by Government for providing the schools with up-to-date equipment. Proposals have further been submitted to Government for the opening of a separate medical school for women.

THE PASTEUR INSTITUTE, COONOOR.

(1ST MARCH 1916 TO 28TH FEBRUARY 1917.)

382. The number of patients treated at the Pasteur Institute during 1916-17 was 1,707, exceeding last year's record figure by 217. The number of Asiatic patients was 1,546, i.e., 167 more than in 1915–16. One hundred and sixty-one Europeans and Anglo-Indians were treated, against 111 in the previous year. Of the total number of patients, 4 died during the treatment, 5 within a fortnight after the completion of the treatment, and 15 at some later date. The last are classed as failures, giving a rate of ·87 per cent. This failure rate compares unfavourably with that of last year (·54), which was, however, abnormally low. 169 persons came for advice but were not treated as it was found that they had run no risk of infection. The system of checking the results of the treatment by means of post-card reports was abandoned in favour of a system of verification through the local authorities. The new system involves more work but gives much more complete results. Attempts were made to secure data as to the comparative mortality in treated and untreated cases, but the results so far have not been very reliable. The receipts during the year were Rs. 33,314 against Rs. 28,132. The expenditure fell from Rs. 20,248 to Rs. 15,636, the saving being chiefly under buildings and repairs and imports from Europe. The Institute had a closing balance of Rs. 38,038.

LUNATIC ASYLUMS. (1916.)

[*G.O. No. 179, Local and Municipal (Medical), dated the 30th April 1917; Statistics of British India, Part V, Area, Population and Public Health—Lunatic Asylums.*]

383. There is accommodation for 978 lunatics in the asylums at Madras, Calicut and Vizagapatam. Additional buildings have been provided at Madras and Calicut for the treatment of hospital patients. 222 males and 54 females were admitted during the year; of these 43 and 11 respectively were criminals. Two males were admitted as voluntary boarders. The daily average population was 832·68. Of those under treatment 10·36 per cent were discharged as cured, 4·55 per cent were partially cured, 2·36 per cent were discharged without relief and 7·73 per cent died. The daily average sick in hospital was 79·49. The fall of about 25 per cent occurs mainly in the Madras Asylum and is due to a comparatively healthy year. Dysentery was as usual the chief cause of death but tubercle was also in evidence especially at Calicut. Of the criminal lunatics nine were discharged to stand their trial. Two criminals escaped from Madras and are still at large. There were four escapes among civil patients all being recaptured. The total expenditure on the asylums decreased from Rs. 2,16,127 in 1915 to Rs. 1,98,869, while there was an increase of Rs. 1,335 in receipts

SANITATION. (1916.)

[*Annual Reports of the Sanitary Board, Sanitary Commissioner and Sanitary Engineer for 1916.*]

Sanitary Board.

384. During the year under report the question of altering the constitution of the Sanitary Board was considered but no change was found to be necessary. The Board issued one type-design during 1916—a revised design for a mortuary. Thirty-eight sanitary schemes were examined during the year. Plans and estimates for 19 schemes amounting to Rs. 17,22,657 were approved ; 14 of these costing Rs. 16 lakhs relate to municipalities. Five works costing Rs. 77,890 were finished and three more estimated at Rs. 43,440 were under execution. Of the six schemes recommended to Government for sanction, three involving an expenditure of Rs. 1,28,000 were sanctioned, others being ordered to lie over for financial reasons.

Sanitary Commissioner.

385. In respect of water-supply schemes, although the number of opened works remained stationary, two additional works advanced to the stage of execution. Progress in major drainage works was practically the same as in the previous year. Owing to the financial stringency arising out of the war and the difficulty of obtaining materials from Europe, major works of water-supply and drainage generally received a set-back. First-class health officers were employed in the municipalities of Madura and Trichinopoly ; but owing to the dearth of qualified candidates no second-class health officers were appointed during the year to any of the eight municipalities to which they had been allotted. There was an increase in the number of sanitary inspectors and maistries but a regrettable fall in the menial conservancy staff. The conservancy plant increased in quantity, but there is a tendency to prefer cheap enclosures to type-design latrines. The number of private latrines in all municipalities rose by only 3·7 per cent. The private scavenging service worked efficiently and was self-supporting in most municipalities ; but the tendency to make it a source of income and profit was noticeable in several towns. Sewage farming was carried out in seventeen municipalities. The allotment for sanitation in all municipalities was 31·3 per cent of the aggregate income. The expenditure during the nine months ending December 1916 was 66·5 per cent of the allotment. Of the total expenditure (Rs. 17,57,804) improvement of water-supply absorbed Rs. 3,28,172 and conservancy Rs. 8,97,831. Town-planning operations did not make much headway during the year as proposals for giving effect to the recommendations of the town-planning experts were still under consideration by the local bodies concerned.

District Boards.

No advance was made in the matter of providing protected water-supply or a regular system of drainage in any of the rural areas. Conservancy arrangements were extended to 63 additional villages but the percentage of conserved villages amounted to only 2·3. Two rural water-supply schemes are under execution. The allotment for sanitation from Local Funds amounted to Rs. 13,05,818 or 14·3 per cent of the income which was Rs. 91,29,986, but the expenditure during the nine months ending December 1916 was only Rs. 6,55,273. Out of the total allotment, Rs. 3,53,415 were assigned to improvement of water-supply, and Rs. 5,52,037 to conservancy.

Sanitary Engineer.

386. Twenty-six municipal water-works were in operation during the year and one underground drainage scheme. The construction of 13 water-works for municipalities and 2 drainage schemes was continued. Owing to the war the completion of three municipal water-works was prevented as the pumping plant and other requirements were either lost en route or the manufacture was retarded owing to the suppliers being engaged on munitions work. Seven water-supply schemes and five drainage schemes were drawn up by the Deputy Sanitary Engineers and 149 sanitary estimates to the amount of Rs. 10·67 lakhs received from local bodies were scrutinized and either sanctioned or forwarded to the Sanitary Board. 184 estimates aggregating Rs. 13·07 lakhs had to be

returned to the local bodies for revision. Constant attention was given to the maintenance of existing water-works. The policy of metering house-connexions, though unpopular, has been amply justified by the results. The experimental filters at Guindy continued in operation under the Sanitary Engineer, the examination of samples being conducted by the Director of the King Institute. Seventeen estimates for municipal sanitary works totalling Rs. 13,659 were sanctioned by the Deputy Sanitary Engineers under their powers of sanction.

VACCINATION. (1916–17.)

[*Annual Report on Vaccination in the Madras Presidency and on the work of the Vaccine Section of the King Institute of Preventive Medicine, Guindy, for the year 1916–17; Statistics of British India, Part V, Area, Population and Public Health—Vaccination.*]

387. The experiment of storing vaccine lymph in the raw condition and grinding and mixing it with lanoline as required for issue was discontinued. The vaccine was prepared throughout the year on the old method and the bulk of the lymph supplied was lanolinated vaccine. Glycerinated vaccine was supplied to Madras and Colombo. The average success rate of the year was 86·81 per cent of the cases vaccinated against 87·70 per cent in 1915–16. The total vaccination work performed by all agencies was 1,481,337 primary vaccinations and 218,589 re-vaccinations; the total number of operations was about 100,000 less than in the previous year, in spite of the prevalence of small-pox. The decline both in quantity and quality of the work of the vaccinators is almost certainly due to the unsatisfactory pay and status of the staff. Efforts are being made to improve the position of the vaccinators with a view to improve the quality of their work. There was a satisfactory increase in infantile vaccination in Ganjām and Kurnool but the districts of Nellore, South Arcot and Cuddapah showed a marked decrease in this respect. The average cost of each successful case rose from As. 3–9 to As. 4–1; it varied from As. 2–6 in the Tinnevelly district to As. 11–2 in the Nilgiris. The total cost of the vaccination establishment was Rs. 3·43 lakhs and the net cost of the lymph was Rs. ·39 lakh.

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CHAPTER VII.

INSTRUCTION.

GENERAL SYSTEM OF PUBLIC INSTRUCTION.

388. *Vide* pages 213 to 228 of the Report on the Administration of the Madras Presidency during the year 1911–12.

EDUCATION. (1916–17.)

[*Report on Public Instruction in the Madras Presidency for 1916–17 and for the quinquennium, 1911–12 to 1916–17* ; *Statistics of British India, Part VII—Educational.*]

Progress of the quinquennial period.

389. With the outbreak of war in Europe many desirable schemes had to be postponed for financial reasons. The chief events of the quinquennium were the appointment of a special officer to assist the Director of Public Instruction for two years, the reorganization of the inspecting staff, the transfer of Industrial Schools to the Director of Industries, the holding of a number of conferences, the development of the Madras University, the increase in the number of arts colleges, the improvement and reorganization of professional colleges and special schools, the improvement of European, Muhammadan and Sanskrit education, the first beginnings of the medical inspection of schools and a number of changes in the Grant-in-Aid Code and the Madras Educational Rules.

General Statistics.

Number and strength of institutions.

390. During the year the total number of public institutions rose from 30,474 to 31,276 and their strength from 1,491,945 to 1,534,051. The number of private institutions, advanced and elementary, was 4,769 with a strength of 126,961. Classified according to management, out of a total of 36,045 schools and colleges of all kinds 7,723 were under public management, Government managing 488, municipal councils 587 and local boards 6,648. The remaining 28,322 were under private management, 19,657 being aided from public funds, 3,896 being unaided and 4,769 indigenous and private schools. During the quinquennium the total number of public institutions rose from 25,859 to 31,276 or by 20·9 per cent and their total strength from 1,152,886 to 1,534,051 or by 33·0 per cent. The number and strength of private institutions showed a decline, the former by 8·8 per cent and the latter by 0·1 per cent. Taking public and private institutions together, the number of institutions rose by 16·0 per cent and their strength by 29·7 per cent as against an increase, in the case of the latter, of 27·1 per cent in the previous quinquennium. There was a decrease in the number of institutions in the case of five districts and of strength in the case of three districts. The number of Government institutions, municipal and local board schools and of aided institutions has steadily risen while there has been a decline in the number of unaided institutions. The percentage of male scholars to the male population increased from 5·1 in 1911–12 to 6·5 in 1916–17 and the corresponding percentage for female scholars rose from 1·0 to 1·5 ; the percentage of the number of scholars—male and female—to the total population rose from 3·0 in 1911–12 to 4·0 in 1916–17. The increase in the percentage of scholars to population took place in all the districts except Madura, Tinnevelly and Salem.

Quinquennial figures.

391. The total expenditure of the year rose from Rs. 135·6 lakhs to Rs. 216·9 lakhs of which Rs. 148·5 lakhs represented direct expenditure. Of the total expenditure, public funds contributed 53·15 per cent, fees 26·46 per cent and other sources 20·39 per cent, the percentages showing little variation from those of last year. Arts colleges claimed 6·62 per cent, professional colleges 2·84 per cent, general schools 55·31 per cent, special schools 7·72 per cent and general or indirect charges 27·51 per cent of the total expenditure. Excluding the figures relating to the Lawrence Memorial School, Ootacamund, and professional colleges and special schools under the control of other departments except industrial schools, provincial receipts and charges aggregated Rs. 3·65 lakhs and Rs. 91·38 lakhs respectively against Rs. 3·25 lakhs and Rs. 49·22 lakhs respectively in the previous quinquennium. Of the total heads of expenditure under the various heads of education, the percentages met from public and private funds were 53·15 and 46·85 respectively. The average cost of general education in public institutions for boys under the three heads, Government, board and aided schools was for arts colleges Rs. 308, Rs. 131 and Rs. 138 ; for secondary schools Rs. 63, Rs. 25 and Rs. 28 ; and for elementary schools Rs. 13, Rs. 6½ and Rs. 4 respectively. Comparing these figures with those for the previous quinquennium it is found that the total expenditure on education, including that on the industrial schools increased by Rs. 74 lakhs or 55 per cent. The amounts met from the five main sources, provincial funds, district funds, municipal funds, fees and private funds, all increased considerably but in very different proportions. The increase in district board and municipal expenditure was largely met by contributions from provincial funds, and taking the first three sources together, it will be seen that expenditure from public funds showed an increase of 79 per cent. Fees rose by 51 per cent and the amount contributed from private funds and other sources by a little less than 20 per cent. Thus the share of the expenditure borne by public fund is proportionately greater and that borne by private funds proportionately less. The total direct expenditure has increased by 57 per cent in the quinquennium, while the indirect expenditure has risen by nearly 50 per cent.

Finance.

Quinquennial statistics.

392. With the help of special Imperial and Provincial grants the University has been able to enlarge its functions during the last five years. Courses of special University lectures have been delivered, arrangements have been made to encourage research work and three new University chairs have been established for Indian History and Archæology, Comparative Philology and Indian Economics. Another feature is the compilation of a Tamil Lexicon under the supervision of a committee of experts. Of the changes made in the regulations and curricula, the most important perhaps is that the Intermediate Examination can now be taken in parts in successive years.

Collegiate Education.

University.

393. Two new Government colleges were opened during the quinquennium, one a second grade college for men at Anantapur, the other a first grade college for women at Madras. The total number of students in arts colleges for men and women rose from 4,939 in 1912 to 7,724 in 1917. The striking increase in numbers is largely due to the change in the system of admission, whereby the passing of the Matriculation examination is no longer a necessary preliminary to a University education. The number of women students in arts colleges rose from 46 in 1912 to 184 in 1917. The number of honours students increased from 92 in 1911–12 to 459 in 1916–17.

Arts Colleges.

394. The present staff of the Law College as reorganized in March 1916 consists of a principal, two professors and six assistant professors. The course of study for graduates in law was in 1915 extended from two to three years, but last year there was a reversion to the two years' course. At the College of Engineering the course of study for graduates in civil and mechanical engineering was in 1914 extended from three to four years. The number of students is now double what it was in 1911–12, and improved accommodation will shortly be available in the new residential buildings which are under construction. The Teachers' Training

Colleges for Professional Training.

College at Saidapet is attracting an increasing number of graduates and its accommodation is found insufficient. Consequently arrangements have been made to re-open the Training College at Rajahmundry.

Secondary Education.

395. There has been a pronounced tendency during the last five years to overcrowd the secondary schools in the large towns. The question of whether congestion can be relieved by abolishing the sharp distinction between elementary and secondary schools and encouraging the growth of higher elementary schools is still a matter of controversy. The number of pupils appearing for the Secondary school-leaving examination has increased steadily. In 1913 there were 4,400 candidates appearing for the first time and 2,453 taking a supplementary course : in 1917 the respective figures were 5,578 and 3,343. The number of secondary schools for boys rose from 343 in 1911–12 to 345 in 1916–17, whereas the total strength increased from 99,668 to 134,608 during the same period. The direct expenditure on secondary schools rose from Rs. 24½ lakhs in 1911–12 to Rs. 38 lakhs in 1916–17. To the increase of Rs. 13½ lakhs aided schools contributed nearly Rs. 11 lakhs and board schools Rs. 2½ lakhs. Non-recurring grants to the extent of Rs. 12 lakhs were spent during the quinquennium towards the improvement of school and hostel buildings and the equipment of secondary schools. The average cost of educating each student was Rs. 28–1–4 and average fee paid was Rs. 20–12–0.

Elementary Education of boys.

396. The total number of public elementary schools other than those reserved for girls rose from 24,034 in 1911–12 to 28,867 in 1916–17 and the number of boys attending them was 1,070,942 an increase of 29 per cent during the quinquennium. The increase in the number of schools having a fourth standard is disappointingly small, though the number of complete elementary schools (i.e., schools with all seven standards) rose from 188 to 298. There were in 1916–17 only 4,149 schools of four standards. Only 199 elementary schools were directly under Government. There was a marked increase in the schools under board and municipal management, the number in the former case increasing from 4,079 to 6,095 and in the latter from 312 to 500. The rest of the schools are aided or unaided private institutions, 22 per cent being managed by missions. Out of 38,773 teachers employed in 1911–12 in elementary schools for boys, 12,956 were trained. The corresponding figures for 1916–17 were 49,060 and 16,631. Night schools rose in number from 466 to 707 during the quinquennium with a corresponding increase in strength from 9,784 to 17,606. The total expenditure on elementary schools for boys rose from Rs. 37·55 lakhs in 1911–12 to Rs. 58·32 lakhs in 1916–17, towards which public funds contributed Rs. 42·20 lakhs or 72 per cent, fees Rs. 7·29 lakhs or 13 per cent and other sources Rs. 8·33 lakhs or 15 per cent, the corresponding percentages for the previous quinquennium being 61, 19 and 20, respectively. The average cost per pupil was Rs. 4–13–0 ; each pupil in Government schools (which were mostly in Agency tracts) costs Rs. 13–2–7, in board schools Rs. 6–8–8 and in aided schools Rs. 4–2–0. Fees met 3 per cent of the expenditure in Government schools, 4 per cent in board schools and 17 per cent in aided schools.

Special Education.

Training schools.

397. There were 206 special schools during the year against 178 in the preceding quinquennium. Of these 124 were training schools for masters and mistresses and 79 were technical, industrial or art schools. The number of training schools for mistresses was 24 and their strength rose to 812. Of the total number of mistresses 598 were Indian Christians and 68 Europeans or Anglo-Indians. During 1916-17, 84 sessional schools were at work and 1,283 students completed the course.

Technical and Industrial schools.

398. The number of higher technical schools fell during the quinquennium from 48 to 44, but their strength rose from 2,294 to 2,781. The most popular courses were drawing and commerce. There were 40 recognized industrial schools with 1,970 pupils. Most of these institutions provide instruction in carpentry or lace-making but there were two schools for weaving and two for printing.

Female Education.

399. The number of girls in non-European schools, public and private, rose from 223,012 in 1911–12 to 321,540 in the past year showing an increase of 44 per cent and representing 1·5 per cent of the total female

population as against 1 per cent five years ago. While there is little change in the proportion of secondary schools under public management, in the case of elementary schools Government schools increased in number by 16, municipal schools by 39 and board schools by 352, that is to say, out of a total increase of 532, 407 were schools under public management. There were at the beginning of the quinquennium two arts colleges for women, both under mission management. Two colleges for women have been opened in Madras since 1912, viz., the Queen Mary's College under Government management and the Women's Christian College which is a mission institution and has absorbed one of the existing mission colleges. The strength of the Government College in 1916–17 was 70 students and that of the Christian College 73. Both colleges are largely residential. The number of non-European secondary schools for girls rose from 35 in 1911-12 to 39 in 1916–17 and the total number of pupils from 5,495 to 8,121. The number of teachers in elementary schools for girls has increased from 3,796 in 1912 to 5,421. The percentage of trained teachers to the total number was 62 in 1912, but fell to 56 in 1917, showing that the supply had not kept pace with the increasing demand. The average number of pupils per teacher rose from 23 to 24. The expenditure in secondary and elementary schools for girls rose from Rs. 8·09 lakhs in 1911–12 to Rs. 13·90 lakhs, towards which public funds contributed Rs. 8·6 lakhs or 62 per cent, fees Rs. ·88 lakh or 6 per cent and other sources Rs. 4·42 lakhs or 32 per cent, the corresponding percentages for 1911–12 being 48, 7 and 45.

European Education.

400. Including the two industrial schools under the control of the Director of Industries, the total number of schools for Europeans and Anglo-Indians on the 31st March 1917 was 90 as against 85 at the beginning of the quinquennium. The total strength of the schools has increased from 7,189 to 8,415. It is satisfactory to note that the percentage of increase in the high school department is 31·2. Of the new institutions the most interesting is the St. George's Homes, Kodaikānal, which are maintained by private subscriptions raised both in England and in India and by liberal grants from Government. There are no European schools which provide a college education, Doveton College having closed its higher classes in 1912–13. There has been considerable improvement in the number of qualified teachers. Out of 670 teachers, 473 were fully qualified and only 64 had no certificate of any kind. The results of the European school examinations have been none too satisfactory but the percentage of success has fluctuated from year to year. The expenditure on European schools rose from Rs. 10·17 lakhs in 1911–12 to Rs. 14·55 lakhs in 1916–17. Of this amount Rs. 5·89 lakhs were provided from Provincial funds and Rs. 2·64 lakhs from fees.

Education of Muhammadans.

401. The number of Muhammadan schools increased during the quinquennium from 2,291 to 2,668 or by 16 per cent. Their strength rose from 109,039 to 142,628, or by 31 per cent against a 23 per cent rise in the previous quinquennium. In arts colleges the number of Muhammadan scholars has risen from 96 to 182 and in secondary schools from 5,507 to 7,088. The number of Government schools for Muhammadans rose from 60 in 1911–12 to 66 in 1916–17, while board and municipal schools rose from 520 to 846 and aided schools from 501 to 603. The private schools declined in numbers but increased in strength. There are now 6 secondary schools for Muhammadans as compared with 4 in 1911–12. The number of Muhammadan girls' schools rose during the quinquennium from 245 to 268 and their strength from 10,309 to 13,934. The development of education among the Mappillas continues, the number of schools and scholars having increased by 112 and 13,664 respectively. The expenditure in Muhammadan and Mappilla schools rose from Rs. 4·84 lakhs to Rs. 8·20 lakhs, towards which public funds contributed Rs. 5·59 lakhs or 68 per cent and fees Rs. ·78 lakh or 10 per cent.

Education of Panchamas.

402. The number of institutions chiefly intended for Panchamas rose during the quinquennium from 3,781 to 5,691 and their strength from 100,881 to 158,593. The total number of Panchama pupils in institutions

of all classes rose from 72,190 in 1911-12 to 120,607 in 1916-17. The number of Panchama pupils in secondary schools rose from 280 to 718. The expenditure in Panchama schools rose from Rs. 6·08 lakhs in 1911-12 to Rs. 8·74 lakhs, to which public funds contributed Rs. 4·8 lakhs or 55 per cent, fees Rs. ·24 lakh or 3 per cent and subscriptions and other sources Rs. 3·7 lakhs.

Aboriginal and Hill Tribes.

403. There were in 1916-17 213 schools for the boys of these tribes with 4,607 pupils. The total expenditure on these schools rose from Rs. 50,260 in 1911-12 to Rs. 58,932 in 1916-17, of which Provincial funds contributed Rs. 54,607, local funds Rs. 2,277 and fees Rs. 1,026. There were also 297 boys' schools and 5 girls' schools specially for members of criminal tribes and in these schools 14,351 pupils are studying.

Schools for the blind and for deaf mutes.

404. There are four schools for the blind in the Presidency. Both the boys' school and the girls' school at Palamcottah continued to do good work, and the pupils are enabled to support themselves after leaving school. There is also a school for deaf mutes at Palamcottah and another at Madras.

Private Institutions.

405. During the quinquennium the number of private schools fell from 5,193 with 127,179 pupils to 4,769 with a strength of 126,961. Of this number, 36 were Mactabs or Quran schools, 152 were Mulla schools for teaching Arabic and Persian, 7 were recognized Sanskrit colleges and 283 were Sanskrit schools.

Hostels.

406. There were 312 hostels for boys and 147 for girls in 1916-17 with a total of 22,753 boarders. The majority of these resident students were Indian Christians.

REFORMATORY SCHOOL, CHINGLEPUT. (1916.)

[*Statistics of British India, Part VI, Administrative and Judicial—Jails.*]

407. The average strength rose from 250 to 254 and the number of pupils at the end of the year including five boys under licence was 249. The number of pupils admitted during the year was 48 against 54 withdrawals. Pupils were admitted from all districts in the Presidency, excepting Anantapur, North Arcot, South Arcot, Chingleput, Guntūr, Salem and the Nilgiris. 25 boys came from Tamil districts and 16 from Telugu. One pupil was admitted from Hyderabad. Of the 48 admissions, 23 were habituals, of whom 14 were sent after one previous conviction, 7 after two and 2 after three previous convictions. Of the 25 casuals, no less than 15 had committed serious offences and the remaining ten who were guilty of petty theft might perhaps have been let off with a warning. Of the 249 pupils on the rolls, 155 were sent for not less than five years, 18 boys whose age was 14 will have four years of training and 13 of 15 years of age will remain only for three years. The number of admissions from criminal classes only slightly decreased from 62 to 57, a high percentage in a school population of 249. The majority of the pupils are caste Hindus numbering 124, while the Muhammadans number 29. The rest is made up of 22 Panchamas, 13 Indian Christians and 4 Brahmans. Roughly speaking 70 per cent of the juveniles are in for theft through parental neglect or encouragement, while 30 per cent have committed serious offences which point to hereditary criminal tendencies. The number of cases of malaria is steadily declining, but the total admissions into hospital rose from 231 to 314 and the average daily sick from 8·1 to 9·12. The pupils continue to be re-vaccinated on admission and their weights are recorded monthly; there was a slight fall in the proportion of pupils who gained weight. The general conduct of the boys was good and the number of school offences decreased from 46 to 41. The number of boys not punished at all was 226 out of 249 and the number punished only once was 19. Discipline is made easy by the mark system and the award of good conduct badges which have a money value attached to them. The amount thus earned added to a share of the profits received

for articles turned out in the workshop gives a boy on his discharge sufficient money to purchase tools and implements for a start in life. The total average annual earnings per pupil rose from Rs. 4–3–7 to Rs. 4–10–7 and the total earnings for the year increased from Rs. 1,076–14–6 to Rs. 1,160–13–1. The amount to the credit of the pupils is Rs. 1,455–14–0. Physical training forms part of the curriculum and the boys continue to take a keen interest in football, hockey and other games. The general education of the boys was continued with fair results. Twenty-three boys secured elementary school-leaving certificates. The following trades are taught: carpentry, weaving, blacksmith's work, metal-work, tailoring, masonry and market-gardening. The weaving department is equipped to train maistries and skilled hands, while the metal-work and blacksmith classes manufacture utensils in common use. The mason class attends to the annual repairs of the school. At the Government Technical examinations 40 candidates in all appeared and 36 passed with 9 in the first class. Excluding the cost of supervision, the industries all worked at a profit, and the net profit realized was Rs. 2,068–6–9. Of the 51 pupils discharged in the ordinary course during the year, 33 or 65 per cent are employed and following their trade. 70 or 49 per cent are following their trade out of 143 discharged during the three years previous to 1916. The number re-convicted was 22 or 14 per cent. Deducting sale-proceeds the net expenditure was Rs. 41,526–12–8 against Rs. 39,038–15–4 of the previous year.

MISCELLANEOUS. (1916–17.)

Government examinations.

408. A special examination under the Secondary School-leaving Certificate Board for the benefit of teachers who have failed in the Matriculation or the Upper Secondary examination was held during the year. 94 candidates including two females appeared. The total number of individual candidates registered for the three grades of technical examinations was 11,867. Of 14,617 subject candidates examined 6,523 were successful. There was an increase in the number of candidates examined in all the three grades, but there was a decrease in the percentage of passes for the intermediate and advanced grades. 165 candidates appeared for the competitive examination for the Civil Medical Pupil grade for which 75 vacancies were thrown open to competition. For the special tests 3,981 candidates in all registered their names; 3,176 presented themselves for examination and 1,264 passed. There were fewer entries and a larger number of passes as compared with last year. The receipts amounted to Rs. 1,99,175, while the expenditure was Rs. 1,67,393.

Special tests.

Finance.

Lawrence Memorial School. (1916.)

409. On 31st December 1916, there were on the rolls of the school 301 boys and 168 girls. Of these 12 boys and 12 girls were day scholars. There were 261 children awaiting admission, of whom 92 boys and 97 girls are the children of British soldiers serving or having served in India. The results obtained by the school in the Government examinations were satisfactory—7 boys and 9 girls passed the high school examination and 9 boys and 3 girls the middle school examination. 6 pupils gained Government scholarships. 21 boys entered the Telegraph Department during the year and three of them are already on active service. There were 127 members of the staff and pupils in the Nilgiri Volunteer Rifles. 5 masters and 18 boys have joined the Army direct from the school since the beginning of the war, while 140 old boys of the school are known to be serving in the war zone. The total receipts were Rs. 2,61,471, while the expenditure was Rs. 2,14,338.

School of Arts, Madras.

410. The number of pupils on the rolls on the 31st March 1917 was 286 of whom 17 were females, and the average attendance during the year was 207. In 1915–16 there were 283 students on the rolls and the average attendance was 201. The percentage of artisans was 44. The total number of scholarships tenable at the school is 92. During the year special efforts were made to develop the jewelry class, with considerable

success, in spite of the lack of expert supervision in some branches. The most popular branches of work are lacquer-work, engraving and wood-work. Considerable additions were made during the year to the library and museum. In the Government Technical Examinations 235 students appeared and 163 passed, as against 169 and 130, respectively, in 1915–16. 15 out of 18 candidates passed the examination for the Technical Teachers' Certificate. The cost of the school was Rs. 61,500.

LITERARY SOCIETIES.

411. *Vide* pages 239 to 241 of the Report on the Administration of the Madras Presidency during the year 1911–12.

LITERATURE AND THE PRESS. (1916–17.)

[*Statistics of British India, Part VII—Educational.*]

Public libraries.

Connemara Public Library.

University Library.

412. The total number of readers during the year at the Connemara Library was 22,776 against 20,581 in 1915–16 and was higher than in any previous year. The number of standard works added to the library was 136 of which 101 were purchased and the rest presented. Dictionaries and other books of reference were in greatest request. The total number of readers at the University Library was 8,402 as against 6,456 in 1915–16 and 11,213 volumes were consulted as against 9,076 in the previous year. The privilege of taking books on loan from the Library against a deposit of Rs. 20 was claimed by 133 university readers as against 91 in 1915–16. A supplementary catalogue of books under authors' names brought up to the end of 1916 was published at the end of the year.

The Oriental Manuscripts Library.

The number of manuscripts acquired during the year by the Oriental Manuscripts Library was nearly 800 against 976 in the previous year. The search party was engaged in acquiring manuscripts for only six months of the year. During the latter half of the year, the party was, under the orders of Government, working in the Tanjore Palace Library in connexion with the cataloguing and valuing of the Sanskrit and Vernacular manuscripts there. There was a decrease from 2,062 to 1,462 in the number of visitors to the Library and from 3,810 to 3,183 in the number of manuscripts consulted by them. As usual, works on religion and poetry were most numerously consulted by visitors.

Periodicals. (1916.)

413. There was a slight increase in the number of newspapers published in the Presidency, 211 being in existence at the end of the year. At the same time there was a fall in the number of subscribers to most journals, a notable exception being *New India*, the circulation of which rose from 8,000 to 8,500. The general tone of the press became much more virulent during the year, and there was a marked tendency to use freer and stronger language in referring both to political and general subjects. This state of affairs is probably due largely to the influence of *New India*, the tone of which was so violent as to call for repeated action on the part of Government. This freedom of language which was copied in Madras was generally deprecated by the journals of the mufassal. Nine newspapers failed to start publication and three presses failed to open owing to the demand of security. Formal warnings were conveyed to seven editors of journals. The security deposited by the New India Printing Works was forfeited in August under the Press Act, but the press was allowed to continue work on furnishing a larger security.

Registration of books. (1916.)

414. Notwithstanding the effects of the war, there has been an increase in the total literary output : 2,564 books and 1,765 periodicals were registered as against 2,462 books and 1,818 periodicals in the preceding year. Books published in the vernacular formed a little less than two-thirds of the total publications ; 786 books were published in English and other European languages and 125 in Indian classical languages. The

language distribution was almost the same as in the past year; two languages—German and Badaga—were not represented, but Guzarati found a place in this year's table in lieu of Marathi. As usual, religion apart from philosophy occupied the first place, while the other subjects maintained their respective positions during the year, the only exception being politics, on which subject the number of publications rose from 11 in 1915 to 58. One of the best books of the year was "Pallava Antiquities" by Professor G. Jouveau Dubreuil, which is a work of considerable merit and discloses the amount of useful materials available in South India for historical and archæological research; another English work of note is "Sir Rabindranath Tagore" by K. S. Ramaswami Sastri. As many as 422 works or a little more than 10 per cent of the total seem to have been designed for educational purposes against 377 in the preceding year. The moral tone of the publications registered was on the whole satisfactory.

ARTS AND SCIENCES. (1916–17.)

Government Museum. Visitors.

415. The number of visitors to the Museum during the year under review was 754,316 as compared with 804,431 in 1915–16. As usual Kannu Pongal (16th January) was the day on which the Museum was attended by the largest number of visitors.

Buildings.

416. The detailed plans and estimates for the proposed extension on the southern side of the new building have been approved and the work of construction is in progress. While this additional space will do much to relieve the congestion of exhibits, the difficulty of finding room for recent accessions is increasing in other sections of the Museum and more particularly in the zoological section.

Museum demonstrations.

417. The demonstrations to pupils of the higher classes of high schools in Madras City were continued from November to March. The total number of pupils who attended the demonstrations was 2,355. A series of 10 demonstrations conducted by the Superintendent was given to 210 teachers in Madras schools.

Economic and Botanical.

418. Two tours were made by the Herbarium Keeper, one to Travancore and the other to the Kistna district. They resulted in numerous additions to the economic and botanical sections and a number of new photographs were added to the series illustrating growing plants and the methods of manufacture adopted in the case of various economic products.

Marine Aquarium.

419. The total number of visitors at the Aquarium during the year under review and the amount realized in entrance fees were 106,641 and Rs. 3,795 against 105,670 and Rs. 3,769 in the previous year. The general health of the fish continued to be good.

Meteorology.

420. The thermometer shed at Koraput was completed and opened for observations. The usual repairs were executed at all observatories except three. The chief work of the office was as usual the publication of the Madras daily weather report and the Presidency rainfall returns. Rainfall returns were received from 497 stations as against 498 in the previous year, one station in Trichinopoly district having been closed. No less than 98 per cent of the rain-gauges in the Presidency were inspected by district officers, a fact which largely accounts for the very satisfactory state of rainfall registration. The total cost of the Meteorological department was Rs. 13,449, of which Rs. 3,738 was spent on observatories in the Presidency and the remainder on the head office.

Astronomy. (1916.)

421. At Kodaikānal the record of solar activity was maintained as in former years excepting that direct photographs of the sun were not obtained. Spectroheliograms of the sun's disc in calcium light were obtained on 329 days and of prominences at the limb on 310 days. Photographs of the disc in hydrogen light were secured on 258 days. At Srinagar direct photographs of the sun on a large scale were obtained on 119 days and spectroheliograms, mostly in hydrogen light, on 223 days

under very favourable conditions. The sunspot records show an increase of solar activity compared with the year 1915 and the number of new groups observed rose from 198 in 1915 to 278 in 1916. The mean daily area of prominences on the other hand fell from 5·28 square minutes in 1915 to 3·70 square minutes in 1916. The Grating spectrograph has been employed for studying solar line displacements compared with terrestrial spectra and for photographing the spectra of Venus in order to determine the wave-length of the solar lines reflected by the planet from a face of the sun turned 90° or more from the earth. A continuous registration of earthquake disturbances is made with a Milne Seismometer and 81 earthquakes were recorded during the year. The Magnetic Observatory formerly working under the Survey of India was transferred to the Meteorological Department on 1st August. The photographic records and absolute eye observations were continued as in former years. At Madras the only astronomical observations made are those necessary for the maintenance of an accurate time service for the whole of India. The time gun at Fort St. George failed on 30 occasions out of 732, giving a percentage of success of 96. Owing to the shifting of the instruments from the old Port Office to the new Signal Station the dropping of the semaphore was suspended from 1st January to 22nd February. During the remaining part of the year the semaphore failed on 13 occasions ; on ten of these it was dropped correctly at 2 p.m. The 4 p.m. roll of signals was sent and received at the Central Telegraph Office, for distribution over India, correctly on every day.

CHAPTER VIII.

ARCHÆOLOGY. (1916-17.)

[*Annual Report of the Archæological Department Southern Circle, Madras, for the year 1916–17 ; G.Os. No. 1177, Home (Education), dated 12th September 1917, and No. 1035, Home (Education), dated the 10th August 1917.*]

Archæology.

422. There was no excavation work during the year under review. Rs. 23,793 were spent on conservation out of Rs. 27,000 sanctioned in the budget. The principal work under this head was the repairing of the old fort at Gingee, where there is still some work to be done. In all 119 works of maintenance and repair were carried out. Seven cases of treasure-trove were reported for opinion as to the desirability of Government acquiring the treasure under the Act and a number of metal images were thus obtained for museum purposes. A number of photographs and drawings of the interesting remains at Udayagiri in the Nellore district and Guntupalli in Kistna were prepared and published, and eleven applications for photographs were received from the public. During the year there have been 38 additions to the Standard List of Ancient Monuments. The cost of the establishment was Rs. 19,267.

Epigraphy.

423. Considerable progress has been made with the preparation of *South Indian Inscriptions* of which Part V of Volume II was issued and another part is in the press. During the year under review 462 villages were inspected and 668 stone inscriptions and 24 copper-plate records were examined and transcribed. Detailed epigraphic surveys were undertaken in the taluks of Ambāsamudram (Tinnevelly district), Guntūr and Madakasīra (Anantapur district). Stone inscriptions examined during the year mostly consist of Pandya epigraphs from the south and some are dated in the reigns of the Chola-Pandya viceroys. The Telugu inscriptions supply some further information about the local chiefs who ruled as Kakatiya subordinates in the Telugu country. A few of the records belong to the ruling family of the Kakatiyas and of these latter the one of greatest interest is that of Queen Rudramba found at Malkapuram in the Guntūr district. This inscription records the founding of a college and a maternity hospital. The Kanarese records are in general too fragmentary to be of great use, but some are of historical value, belonging as they do to the early Pallava-Nolumba and Chalukya periods. Considerable interest attaches to the 24 copper-plates examined during the year, especially those which record genealogies of the Eastern Chalukya kings.

CHAPTER IX.

MISCELLANEOUS.

ECCLESIASTICAL JURISDICTION.

424. *Vide* pages 244 to 246 of the Report on the Administration of the Madras Presidency during the year 1911–12.

ECCLESIASTICAL. (1916–17.)

Church of England.

425. The Bishop of Madras was absent on leave for six months from the 29th April 1916, the Venerable the Archdeacon being in charge. The Most Reverend the Metropolitan of India and Ceylon paid his metropolitical visitation from the 31st January to the 15th February 1917. The services of five chaplains were placed at the disposal of the Government of India in the Army Department for active service. Owing to the shortage of chaplains on the establishment, the Government of India sanctioned the appointment of two missionaries as temporary chaplains. At the close of the year there were in all 258 clerks in Holy Orders officiating under the licences of the Bishop of Madras and the Bishop in Tinnevelly and Madura. During the year one European was ordained deacon by the Bishop of Madras, while the Bishop in Tinnevelly and Madura ordained four deacons, all Indians. The Bishop of Dornakal ordained two deacons and six priests, all of whom were Indians. Five clergymen were licensed to officiate in the Diocese of Madras and seven in the Diocese of Tinnevelly and Madura. The alms and other devotions of the people offered through clergymen ministering to English congregations during the year amounted to Rs. 1,52,464.

Voluntary contributions.

Church of Scotland.

426. At the close of the year, the permanent Presidency Senior Chaplain and one Junior Chaplain being on leave, the establishment of the Church of Scotland consisted of three chaplains, namely, the two Senior Chaplains of the churches of St. Andrew at Madras and Bangalore, and one Junior Chaplain at St. Andrew's church, Secunderabad.

STATIONERY. (1916–17.)

Stationery.

427. The value of the stock with the Superintendent of Stationery at the beginning of the year 1916–17 was Rs. 8,08,563 (English stores Rs. 5,26,664 and Indian stores Rs. 2,81,899) against Rs. 9,28,120 (English stores Rs. 6,21,676 and Indian stores Rs. 3,06,444) in 1915–16. The total value of stores received during the year amounted to Rs. 6,48,217 (English stores Rs. 2,38,785 and Indian stores Rs. 4,09,432) against Rs. 8,16,485 (English stores Rs. 3,23,950 and Indian stores Rs. 4,92,535) in 1915–16. The total value of issues amounted to Rs. 7,39,480 (English stores Rs. 3,17,011 and Indian stores Rs. 4,22,469) against Rs. 9,36,042 (English stores Rs. 4,18,962 and Indian stores Rs. 5,17,080) in 1915–16. The value of stationery debited to Local Funds, etc., and of stationery issued on payment amounted to Rs. 16,066 against Rs. 19,079 in 1915–16. The value of the closing balance of stores for the year was Rs. 7,17,300.

THE GOVERNMENT PRESS. (1916–17.)

Finance.

428. The total receipts amounted to Rs. 77,550 against Rs. 81,243 last year. The fall is due to a decrease in the chargeable work and in the sale of Acts and books. The total expenditure was Rs. 4,93,253 against Rs. 5,37,506, a decrease of Rs. 44,253 due chiefly to reductions in printing orders, particularly for forms, and to smaller purchases of plant.

429. The sales of Acts and books amounted to Rs. 38,457 against Rs. 39,256 in 1915-16, while the sales by agents exceeded those of the previous year by Rs. 1,197. Acts and books to the value of Rs. 77,682 were issued free against Rs. 56,453 in the previous year, the increase being due to the supply of costly publications such as the Madras Code, etc. **Publications.**

430. The number of standard pages printed during the year was 274,919 against 296,391 in the previous year, while the cost per page was higher at the Central Press and the Penitentiary Branch and lower at Mount Road and Ootacamund Presses. The number of impressions was 118,578,300 against 148,705,718 in 1915-16. The cost per 1,000 impressions increased in all four presses as a result of smaller demands and the general average per unit for Madras was As. 14-2. The total debits against binding for all the presses amounted to Rs. 1,20,287 against Rs. 1,28,920 in the preceding year and the decrease in expenditure was due to a number of books being bound in cheaper kinds of materials. **Printing and binding.**

431. The additions to the plant cost Rs. 15,512. The output of the type foundry was 43,818 lb. of type, 14,135 lb. of stereos and electros, 27 punches and 119 matrices, while the expenditure was Rs. 2,499 less than last year. The cost of rubber stamps, pads, etc., supplied was Rs. 3,159, representing a rise of 5½ per cent, this being the only head showing any increase compared with the actuals of 1915-16. The number of copies of forms indented for during the year was approximately 133 millions or 72 millions less than in 1915-16. **Miscellaneous.**

432. The value of the work done by district presses, including the Branch Press at Ootacamund, was Rs. 2,76,052 in 1914-17 against Rs. 2,79,689 in the previous triennium. There was an increase of Rs. 13,758 under cash receipts and a decrease of Rs. 5,282 under charges. The increase under cash receipts was mainly due to the large income derived from private advertisements published in the District Gazettes in Guntūr, North Arcot, South Arcot, Tanjore, Madura and Coimbatore. **District presses.**

THE CHEMICAL EXAMINER'S DEPARTMENT. (1916.)

[*G.O. No. 196, Local and Municipal (Medical), dated 5th May 1917; Statistics of British India, Part VI, Administrative and Judicial—Medico-legal Investigations.*]

433. The amount of the work done during the year shows a large increase in miscellaneous analyses and a slight decrease in medico-legal cases. There were 197 cases of suspected human poisoning as compared with 194 in the previous year. The percentage of detections was 46·7 against 46·9 in 1915. The principal poisons detected in their order of frequency were arsenic, mercury and atropine. Convictions were obtained in ten cases which recovered and two which were fatal. There were 88 cases of animal poisoning and 62 animals were reported to have been killed. The percentage of detections was 59. Arsenic continued to be the poison most commonly used. **Medico-legal investigations.** Human Poisoning. Animal Poisoning.

434. Two hundred and fifty-five cases were investigated for blood or seminal stains and the number of articles examined was 908. The percentage of detections was 71·5. Four hundred and sixty specimens of stains concerned in 176 cases were sent to the Imperial Serologist. Of these specimens 400 were found to be due to human blood. 102 convictions resulted from the 208 cases instituted. Stains.

435. 1,582 general analyses were made against 502 in 1916. The work was largely for the Customs Department, but 121 analyses were undertaken for private parties. General Analyses.

CHARITABLE INSTITUTIONS. (1916-17.)

436. Excluding dispensaries, there were 3,076 charitable institutions in the Presidency, with an income of 14·05 lakhs of rupees, 92 garces of paddy and 26 muras of rice. Of these institutions, 2,017 were maintained **General.**

entirely by means of subscriptions and donations from the general public and endowments in land and money, the total receipts from these sources amounting to Rs. 7·33 lakhs. 340 institutions were supported by Government at a cost of Rs. 1·62 lakhs and 108 were maintained at a cost of Rs. 2·50 lakhs partly by Government and partly by the public. The maintenance of the remaining 611 institutions, costing about Rs. 2·60 lakhs, devolved wholly or in part on local bodies. The funds of the institutions were devoted to various objects. In all, 1,940 institutions were intended to provide travellers with accommodation and, in many cases, with food and other supplies. Of these, 1,087 were exclusively for Hindus, 42 for Muhammadans, 6 for Europeans and Eurasians, while the remaining 805 were not restricted to any particular class. 391 institutions were maintained for the relief of paupers. There were 662 institutions exclusively devoted to giving help to Brahmans and Byragis. There were also 7 institutions for orphans, two for Rajput children and two for the support of lepers, the blind and the deaf. The total number of persons aided during the year at all the charitable institutions exceeded 11 millions.

Monegar Choultry, etc. (1916-17.)

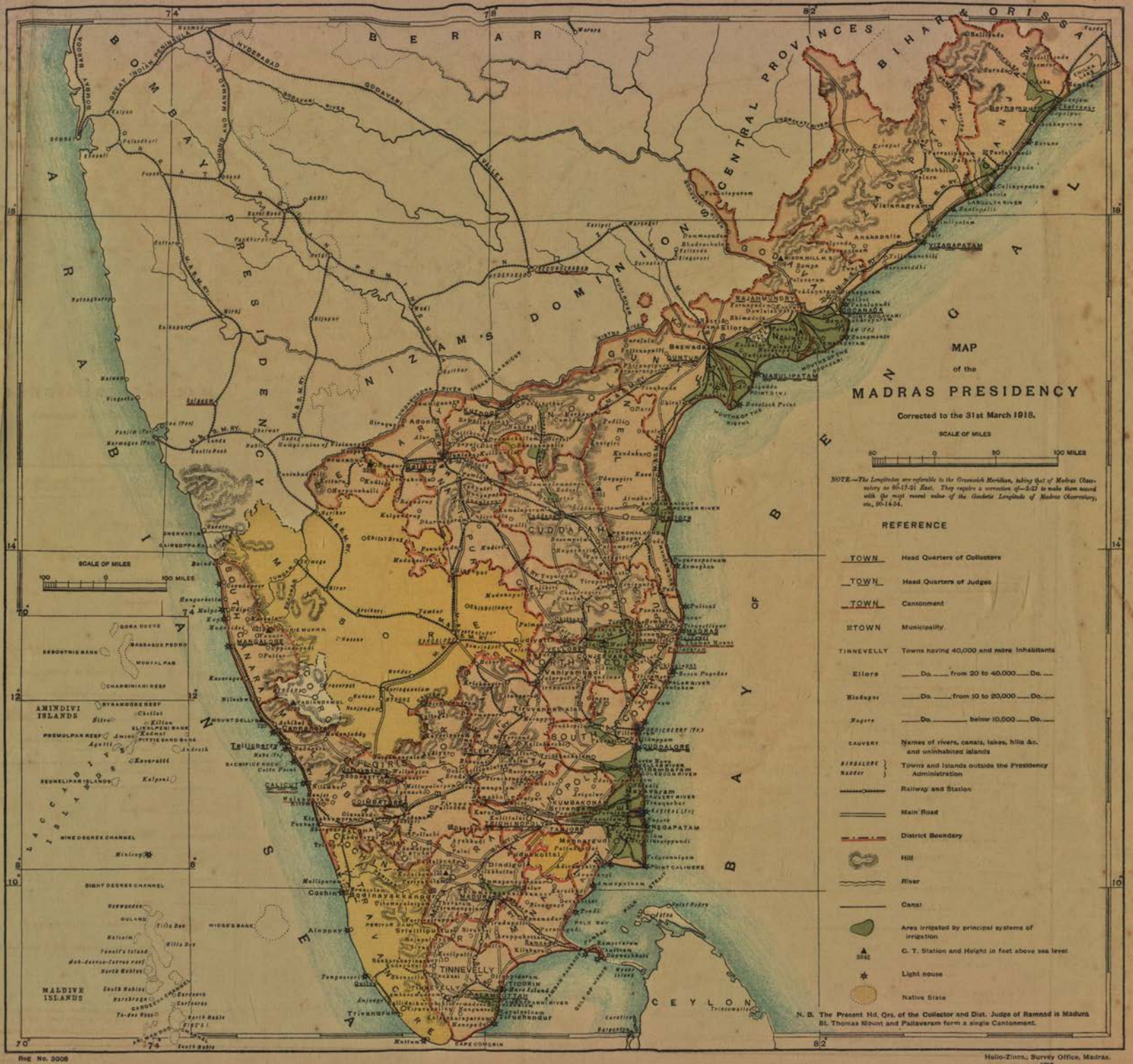
437. Two institutions formerly controlled by the Board of Directors of the Monegar Choultry Charities have been handed over to official management: the Native Infirmary is now the Government Royapuram Hospital, and Raja Sir Ramaswami Mudaliyar's Lying-in Hospital has been taken over by the Madras Corporation. It has been decided to use the small income of the Foundling Hospital to endow eight beds in the children's wards of the Royapuram Hospital. There remain under the active control of the Board of Directors the Monegar Choultry and the Raja of Venkatagiri's Choultry. In the former institution the average daily number of inmates again showed a considerable decline—58·41 to 49·74. The average number of inmates in the chronic wards rose from 21·67 to 31·15. The balance to the credit of the charity on the 31st March 1917 was Rs. 5,872. The Raja of Venkatagiri's Choultry has no separate staff, but one-third of the general establishment of the Monegar Choultry is debited to its funds. The daily average of in-door paupers declined to 15·97 and that of out-door paupers (receiving $\frac{3}{4}$ lb. of rice daily) to 103. On the 31st March 1917 the institution had a balance of Rs. 1,041.

Triplicane Langerkhana. (1916-17.)

438. The receipts of the Triplicane Langerkhana, including an opening balance of Rs. 536 amounted to Rs. 5,595. The daily average number of paupers who received help from the institution was 203 as compared with 189 in the preceding year. There were two female Mussalman paupers in receipt of money doles, but one of them died during the year.

MUHAMMADANS IN THE SERVICE OF GOVERNMENT. (1916-17.)

439. On 1st April 1917, there were 8,355 Muhammadans employed in the superior service of Government. This is 210 less than last year's figure. 575 Muhammadans were admitted into service during the year, the majority as usual entering the police. The next highest figures were 12 in the Forest department and the same number in the Law Courts. Of the total number employed 11 held posts with an annual salary of Rs. 5,000 and above, 40 drew from Rs. 2,500 to Rs. 5,000, 103 Rs. 1,000 to Rs. 2,500, 253 Rs. 500 to Rs. 1,000, and 709 drew from Rs. 250 to Rs. 500. The number earning from Rs. 120 to Rs. 250 rose from 1,981 in 1915-16 to 7,192 owing to the raising of the scale of pay of police constables. Consequently the number earning less than Rs. 120 fell from 5,807 to 47. Although the percentage of Muhammadans to the total population of the Presidency was only 6·6, Muhammadans occupied ·42 per cent of the number of posts in the lowest grade, and 24·35 per cent in the next grade above. Excluding the lowest grades the percentage of Muhammadans in other posts stood at 11. There were 6,749 Muhammadans employed in the Police department, 463 under Law and Justice, 330 in the Land Revenue and 231 in the Educational deparment. In no other department were more than 200 Muhammadans employed.



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REPORT

ON THE

ADMINISTRATION

OF THE

MADRAS PRESIDENCY

FOR THE YEAR

1917-18

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MADRAS
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CONTENTS

PAGE

PREFATORY NOTE ... ... *vii*

INTRODUCTION ... ... *ix*

THE REPORT

CHAPTER I—PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PARA. PAGE

1 Physical features of the country, area, climate and chief staples **1**

POLITICAL

PARAS. PAGE

2 Historical summary **1**

3 Form of administration **1**

4 Character of land tenures **1**

5 System of survey **1**

6 System of settlements **1**

7 Civil divisions of the British territory **2**

8 Details of the census of 1911—tribes and languages **2**

9 **Changes in the Administration** ... 2

10 **The Madras War Fund** 2

11 **His Excellency the Governor's Tours** 3

Relations with Tributary States

TRAVANCORE STATE

12 General and political 3
13 Revenue and finance 3
14 Protection and legislation 4
15 Production and distribution 5
16 Vital statistics and medical services ... 6
17 Education 6

PARAS. PAGE

COCHIN STATE

18 General and political 6
19 Revenue and finance 7
20 Protection and legislation 7
21 Production and distribution 8
22 Vital statistics and medical services ... 9
23 Education 9

PUDUKKOTTAI STATE

24 General and political 10
25 Revenue and finance 10
26 Production and distribution 10
27 Protection and legislation 10
28 Vital statistics and medical services ... 12
29 Education 12

BANGANAPALLE STATE

30 General 13
31 Revenue and finance 13
32 Protection 13
33 Vital statistics and medical services ... 13
34 Education 13

SANDUR STATE

35 General and political 14
36 Revenue and finance 14
37 Protection 14
38 Production and distribution 14
39 Vital statistics and medical services ... 14
40 Education 15

41 **Condition of the People** 15

42 **Political Pensions** 16

CHAPTER II—ADMINISTRATION OF THE LAND

Realization of land revenue

43 Sources of land revenue 17
44 Collections 18
45 Coercive processes 18
46 Transfer of registration 18
47 Loans and advances 19

Surveys

48 Operations 19
49 Parties 20
50 Central office 21
51 Outturn and outlay 21

Settlements

52 Parties 21
53 Districts 21
54 Registers 22
55 Finance 22

Land records

56 General 23
57 Operations preliminary to maintenance ... 23
58 Current maintenance 23
59 Training of staff 23

60 **Waste lands** 24

61 **Government estates** 24

Wards' estates

62 Estates under management 24
63 Finance 24
64 Works 25
65 Debts 25
66 Education of the wards 25
67 Miscellaneous 26

Revenue and rent-paying classes

68 Revenue-paying classes 26
69 Rent-paying classes 26

CHAPTER III—PROTECTION

PARAS.		PAGE
70	**Legislating authority**	**27**
	Course of legislation	
71	Legislative Council	27
72	Acts and Bills	27
73	Government of India	27
	Police	
74	Administrative changes	27
75	The police force	28
76	Village police	29
77	Armed reserves	29
78	Railway police	29
79	Statistics of crime	29
80	Detection and prevention of crime ...	30
81	Criminal Investigation department ...	30
82	Finance	31
	Criminal justice	
83	Courts	31
84	Original cases	31
85	Appeals	32
86	Reference and revision	32
87	The jury system	33
88	Miscellaneous	33
	Prisons	
89	Accommodation	33
90	Prisoners of all classes	33
91	Convicts	34
92	Conduct	34
93	Vital statistics	35
94	Finance	35
	Civil justice	
95	Courts	35
96	Litigation	36
97	Courts of original jurisdiction	36
98	Appellate courts	37
99	Insolvency	37
100	Miscellaneous	38
101	Finance	38
	Registration and companies	
102	Registration	38
103	Registered companies	38
104	Notaries Public	39
	Co-operative societies	
105	General	40
106	Working of societies	40
107	Miscellaneous	42
	Local Board administration	
108	General	42
109	Finance—Receipts	43
110	Do. Expenditure	43
111	Railways	44
	Municipal administration—mufassal	
112	General	45
113	Finance—Receipts	45
114	Do. Expenditure	45
115	Debt	46
	Municipal administration—City of Madras	
116	Finance	46
117	Works	46
118	Education	47
119	Sanitation and medical services ...	48
120	Miscellaneous	48
121	**Military (Volunteering)**	48
	Marine	
122-124	Madras Port Trust	49
125-126	Minor ports	50
	Mortality from wild animals and snakes	
127	Mortality	51
128	Rewards	51
	Miscellaneous	
129	Arms, explosives and sulphur	51
130	Poisons Act	52

CHAPTER IV—PRODUCTION AND DISTRIBUTION

	Agriculture	
131	General	53
132	Agricultural research and experiments ...	54
133	Scientific research and experiments ...	55
134	Aid to the public	56
135	Agricultural associations	57
136	Agricultural engineering	57
137	Finance	58
138-139	Civil Veterinary department	58
	Weather and crops	
140	Rainfall	59
141	Crops	59
	Horticulture	
142	Government Botanic Gardens and Parks, the Nilgiris	60
143	The Agri-Horticultural Society, Madras ...	60
144	Government cinchona plantations ...	61
	Fisheries	
145	General	61
146	The West Coast stations	62
147	Piscicultural work	62
148	Fishing experiments	63
149	Marine work	63
150	Socio-economic work	63
151	**The Government Soap Works** ...	64
	Forests	
152	Area	64
153	Communications and buildings	65
154	Protection of forests	66
155	Sylviculture	66
156	Exploitation	67
157	Finance	68
158	Research and experiments	68
159	Miscellaneous	68
160	Forest College, Coimbatore	68
	Mines	
161	Output	69
162	General condition of the employees ...	69
	Manufactures	
163	General	69
164	Factories	71
165	The department of industries ...	71
	Sea-borne Trade	
166	General	72
167	Customs revenue	73
168	Foreign imports	73
169	Foreign exports	76
170	Government transactions	78
171	Shipping	78
172	General effects of the war	79
173	Trade according to countries	79
174	Coasting trade	79
175	Ports	79
176	Miscellaneous	79
	Public Works	
	GENERAL	
177	Administrative changes	80
178	Chief Engineer's office	80
	CIVIL WORKS	
179	Works in progress	81
180	Workshops	82
	RAILWAYS	
181	Development	82
182	Accidents	83
183	Miscellaneous	83
184	TRAMWAYS	83
185	CANALS	84
	IRRIGATION	
186	Gross expenditure and revenue	84
187	Class I, Major works	84
188	Class II, Minor works and navigation ...	85
189	Class III works	85
190	Class IV, Agricultural works	85
191	Investigation of projects	85
192	Miscellaneous	86
193	Ayacut maps	86

CHAPTER V—REVENUE AND FINANCE

PARAS. PAGE

Revenue and Finance other than Municipal

(*a*) GROSS REVENUE

194 Revenue and expenditure 87
195 Surplus revenue 88
196 Cash balances 89

(*b*) IMPERIAL REVENUE AND FINANCE

197 General 89
198 Land revenue 89
199 Customs 89
200 Opium 90
201 Salt 90
202 Excise (Abkári) 91
203 Stamps 91
204 Income-tax (excluding super-tax) ... 91
205 Super-tax 91
206 Other Imperial receipts 91
207 Transfers between Imperial and Provincial 91
208 Other Imperial expenditure 92
209 Capital outlay on State Railways and Irrigation works not charged to Revenue ... 92
210 Imperial loans 92

PARAS. PAGE

(*c*) REVENUE AND FINANCE OTHER THAN IMPERIAL.

211 Provincial revenues 92
212 Land revenue 92
213 Stamps, Excise and Income-tax 93
214 Forests 93
215 Registration 93
216 Canal revenue 93
217 Other Provincial receipts 93
218 Other Provincial expenditure 94
219 Provincial loans 95
220 Local funds 95
221 **Municipal revenues** 97

Excise Administration

222 General 97
223 Administrative changes 97
224 Licensing Board and Advisory Committees 97
225 Measures in aid of temperance 98
226 Country spirits 98
227 Toddy 98
228 Foreign liquor 98
229 Opium and intoxicating drugs 98
230 Offences 98

CHAPTER VI—VITAL STATISTICS AND MEDICAL SERVICES

231 Details of Census **99**

Births and deaths

232 Population 99
233 Registration of vital statistics 99
234 Chief diseases 100
235 Europeans and Eurasians 101

Emigration and immigration

236 Regulated 101
237 Non-regulated 101

Medical relief

238 General 102
239 Institutions 102
240 Relief 102
241 Finance 103
242 Madras Medical College 103
243 Medical schools 103
244 **The Pasteur Institute, Coonoor** ... 104
245 **Lunatic asylums** 104

Sanitation

246 Sanitary Board 105
247 Sanitary Commissioner 105
248 Sanitary Engineer 106
249 **Vaccination** 106

CHAPTER VII—INSTRUCTION

250 General system of public instruction **107**

Education

251 Administrative events of the year ... 107
252 General statistics 107
253 Finance 107
254 University and collegiate education ... 108
255 Secondary education 108
256 Elementary education 109
257 Special education 109
258 Female education 109
259 European education 110
260 Education of Muhammadans 110
261 Education of backward classes and others 110
262 Private institutions 110
263 Hostels 110
264 **Reformatory School, Chingleput** ... 111

Miscellaneous

265 Government examinations 112
266 Lawrence Memorial School 112
267 School of Arts, Madras 112
268 Literary Societies **113**

Literature and the Press

269 Public Libraries 113
270 Periodicals 113
271 Registration of books 114

Arts and sciences

272 Government Museum 114
273 Marine Aquarium 115
274 Meteorology 115
275 Astronomy 115

CHAPTER VIII—ARCHÆOLOGY AND EPIGRAPHY

276 Archæology 116
277 Epigraphy 116

CHAPTER IX—MISCELLANEOUS

PARAS.		PAGE
278	**Ecclesiastical Jurisdiction**	**118**
	Ecclesiastical	
279	Church of England	118
280	Church of Scotland	118
281	**Stationery**	118
	The Government Press	
282	Finance	119
283	Publications	119
284	Printing and binding	119
285	Miscellaneous	119
286	**The Chemical Examiner's department**	120
287	**Charitable Institutions**	120
288	**Muhammadans in the service of Government**	121

PREFATORY NOTE

IN this publication, Part I—the General Summary—is omitted and an introductory chapter takes its place. The report will, in future, be prepared in the present form.

INTRODUCTION

SUMMARY.

Political situation.—1. During the period under review the political activities of the Presidency are mainly traceable to three more or less distinct movements—the earlier agitation of the Home Rule party; their later action which culminated in the foundation of the Madras Presidency Association and their labour campaign; and the steadily-growing opposition of the non-Brahman element. Friction arose early in May as the result of a Government order prohibiting students from attendance at political meetings and from joining political associations. The extremist outcry which followed this order eventually crystallized into a scheme for the furtherance of "National Education"; but this venture, though placed in the forefront of the extremist propaganda and steadily pressed with various ingenious devices, made but a laboured progress. Throughout the month of May the party press indulged in unusually violent and provocative language, and at the Legislative Council meeting of the 24th His Excellency Lord Pentland sounded a deliberate note of warning on the Home Rule question and the attitude of Government towards the agitation. This was consistently disregarded and as a result, on the 16th June, there issued an order directing Mrs. Besant with Messrs. Arundale and Wadia to abstain from attending political meetings or making speeches and to take up their residence in one of six areas. They selected Ootacamund, which at once became a mischievous political centre and place of pilgrimage for Home Rule workers until in August Mrs. Besant was permitted, on grounds of health, to transfer her residence to Coimbatore. Her principal press organ, *New India*, after a few days' cessation in June, was taken over by a group of journalists from Bombay, who devoted themselves to vilification of the Government and agitation for the release of the interned persons accompanied by efforts to secure the sympathies of the Muhammadan community by advocating the cause, as "fellow-martyrs," of the détenus Muhammad Ali and Shaukat Ali. Though projected with great energy this agitation produced little in the way of genuine popular protest and manifested itself principally in the forms of engineered "protest meetings," where resolutions addressed to the Premier, the Viceroy and other high authorities were passed, of institution of funds, and of violent newspaper polemics. On the 18th September, however, the Madras Government, acting in deference to the wishes of the Government of India, issued a communiqué announcing the withdrawal of the restrictions imposed on the interned persons; the first fruits of this action were a decided accession of influence to Mrs. Besant whose position in the advanced party was materially strengthened, and a vigorous counter-movement towards organization and expression on the part both of the non-official European community and of the conservative non-Brahmans. The latter had for

some time been making steady headway, more especially in the mufassal, and the foundation of their newspaper *Justice* did much to unite their several elements and supplied them with a weapon of attack and defence. Brahman and non-Brahman controversies were lively in many districts, and in August in Coimbatore, where Mrs. Besant was even then residing, the non-Brahmans were actually able to organize and hold an opposition district conference, which, according to the majority of accounts, was the more successful and the better attended of the two. In the previous month the leading Madras zamindars had, by a published manifesto, definitely dissociated themselves from the principle of Home Rule. The contemporary efforts of the Home Rule party to enlist the ryot and female elements and the Muhammadan community were unattended by any considerable measure of success. In November the Shiah and Sunni Maulavis of Madras town rejected the Home Rule policy and the Presidency Muslim League began to break up. Mrs. Besant's abandonment of the cause of Muhammad Ali and Shaukat Ali led to dissensions within the party itself and there was besides a sharp and bitter schism over the question of passive resistance.

Similar division of feeling manifested itself in connexion with the movement, favoured in advanced circles, for the formation of an Andhra or Telugu province. The conflict between opposing schools of thought culminated at the time of the visit paid to Madras by His Excellency the Viceroy and Mr. Montagu in connexion with the reform proposals, when the political atmosphere of Southern India was generally characterized by an unprecedented degree of disturbance and mutual recriminations were exceptionally rife.

The subsequent energies of the Home Rule party during the year under review were devoted to an attempt at labour organization. *New India* had always endeavoured to enlist the sympathies of the Labour Party at home with a view to valuable political support; the extremists now turned their attention to the labourer at their door as a potential instrument of unrest. In January 1918 the non-Brahman wing of the Home Rule party represented by a body styling itself the Madras Presidency Association secured as their organ in the press the *Indian Patriot* and proceeded to publish articles upon the hardships of mill hands in which labour organization was demanded and the principle of passive resistance again loudly advocated. The period closed with a threatening of strikes in various quarters and with the establishment of a Labour Association.

War attitude.—2. The political progress of the year has been placed before a discussion of its war aspects because it is beyond question that these two factors so presented themselves to the popular mind. The war was constantly overshadowed by political excitements—first by the internments and their sequel and subsequently by the visit of the Viceroy and the Secretary of State. Save where Mrs. Besant had specially been active in its behalf the recruitment for the Indian branch of the Indian Defence Force aroused but little interest; here and there it met with active opposition for political ends. To the recruiting campaign for the regular army a similar attitude was generally adopted; where the matter gained attention or

discussion in the press, it was commonly under its political rather than its national or imperial aspects. Ill-informed or misinformed communities naturally read into the release of Mrs. Besant and her colleagues the interpretation that the allied cause was failing and that concessions from weakness were to be the order of the day—an impression which may have had far-reaching results beyond the period at present dealt with.

War effort.—3. The response to the War Fund appeal was at first disappointing but made a marked improvement as the year went on. A Provincial Recruiting Board was established in August 1917 : recruiting began slowly and up to the opening of the period under review was decidedly below the desired level ; by July, however, the monthly total of combatants had risen to 878 and by December to 1,466 ; non-combatant recruiting also doubled its figures in the same period. It is not to be denied, however, that the idea was never popular in this Presidency, where long habituation to non-military conditions rendered the awakening of the old martial spirit which fed the armies of Cornwallis and Wellesley no easy task. A signalling company raised at the instance of Sir Sivaswami Ayyar was fully filled, however, and all services were denuded of officers to supply the I.A.R.O. During the year the Indian Defence Force as newly constituted came into being, the thirteen volunteer corps under the area of the 9th (Secunderabad) Division being reorganized into ten I.D.F. units with a total strength of over seven thousand men. This force bore its full share of garrison and guard duties. The Indian branch of the Force undoubtedly owed much, in the initial stages of its inauguration, to the advocacy of Mrs. Besant, but on the other hand the protest withdrawals which a section of the press strove to organize at the time of the internments came to very little. Over eleven hundred were enrolled by August 1917 and the training of the first batch, the reports on which were satisfactory, was commenced on the 1st October. Apart from all other considerations, there is no doubt that as a healthy counter-attraction to politics in the case of the younger men the institution of the force fulfilled a function whose utility it would be hard to over-emphasize.

Finance.—4. The financial policy in Indian affairs is directed by the Imperial Government and will therefore be properly summarized in the general précis to be written by them for the whole of India. Provincial revenues advanced from Rs. 794·79 lakhs to Rs. 834·32 lakhs, the increase occurring mainly under Excise, Income-tax and Forests, while the Provincial balance rose to over Rs. 200 lakhs in consequence of the restrictions on expenditure. The enhancement of the *ad valorem* duty on cotton piece-goods under the revised tariff of March 1917 and the general rise in prices produced an appreciable increase under import duty, but half of this was neutralized under export duty by the drop in the exports of tea and rice. A highly unfavourable season did much to annul the projected exploitation of the Bengal salt market which war conditions in that Presidency had opened to the Madras supply. The auction sale of Government salt was resorted to with the intention of countering the high and fluctuating prices of excise salt but resulted in a gain of Rs. 15 lakhs to Government owing to speculative buying by Calcutta dealers.

There was an increase in the receipts from income-tax and the proceeds of the first year's working of the super-tax under Act VIII of 1917 amounted to nearly Rs. 5 lakhs. The military market contributed to a very considerable enhancement of the revenue from Forests.

Agriculture.—5. A season, favourable so far as the total quantity of rainfall went, was considerably marred by unequal distributions in the monsoons : breaks occurred at abnormal periods and the usual break between the monsoons was practically, and in some districts entirely, unmarked. In spite of these seasonal disadvantages, however, the Agricultural Department were able to carry through their programme of experimental work almost unhindered, and the advance made in this sphere of activity is striking not less in kind than in degree. The measures recently undertaken in Egypt have been imitated in India and the gratifying result has been attained that, in the Tinnevelly district, the main cotton growing area of the Presidency, *Pulichai* cotton has been almost entirely eradicated, and the substitution of pure improved strains for the country mixture has been accomplished. The experimental work on paddy cultivation has assumed a definite shape and it is believed that the value of the Presidency crop can in time, as a result of these most important investigations, be increased by 20 per cent, or by no less a sum than twelve crores. Scientific work on the coconut has been inaugurated and a start has been made with apiculture. The projected scheme under which, in certain areas, the agricultural and co-operative credit departments will work in joint harness should produce a beneficial effect.

A shortage of labour impeded the activities of the Horticultural branch, but the experimental work carried out on medicinal plants is in itself of considerable value. On the other hand, one of the most prominent and satisfactory features of the period under review is the record year—in every sense—of the Government Cinchona Factory at Naduvattam which supplied no less than 20,000 lb. of quinine for the armies in East Africa and Mesopotamia and worked during the year at a profit of Rs. 7½ lakhs or nearly double the annual expenditure.

Forests.—6. The policy of abandoning small isolated reserves and converting all valuable reserved lands into reserved forests was continued and some progress, though not a great deal, was made with the forest panchayat system. In common with all other departments the Forest Department suffered serious dislocation from the absence of its officers on military duty ; in addition to this the war services of the department were considerable. The marketing of tanning stuffs was handed over to the Munitions Board and the department was thereby involved in a loss of revenue approximating to Rs. 3 lakhs, which may be regarded as a portion of the Presidency's financial contribution to the war. Tanning-barks and hay as well as timber were supplied to the Military Departments in considerable quantity and the financial results of the year exhibited a notable profit.

Trade.—7. The total value of the sea-borne trade of the Presidency, which approached five thousand lakhs, showed a decrease, as against last year's figures, of five hundred lakhs ; Government transactions

were, however, very high on account of the purchase of tanned hides for the War Office. The general effect of the war was, as might be expected, to increase the British Empire's share in the Presidency's trade. The export statistics for the Presidency port show the highest figure for fourteen years, the principal increases being in ores, groundnut, oil-cake and vegetable oils. There was, of course, a corresponding decrease in imports, the commodities involved being such as the stoppage of shipping facilities from Europe would most naturally affect. Abnormal quantities, however, of sugar, rice, raw hides and mineral oils entered the country. The depletion of steam tonnage and the various export and import restrictions were a more serious blow to the small ports than ever, but led to an interesting revival in wooden ship-building for the coasting trade, which was increasing in volume towards the close of the year. In the absence of connexion with Europe, the exploitation of the Straits Settlements and Australian markets was markedly successful.

As regards internal trade, there were constant complaints over the unavoidable shortage of rolling-stock and raw products formerly exported to Europe were seriously held up. The feature of the year—a feature with effects of a far-reaching nature—was the upward leap in the price of cotton, in sympathy with the rise in America. Rice rose steadily in price throughout the year, and though actual producers and middlemen secured almost universal profits, there was considerable pressure on persons with fixed incomes. The improvement in registration noticed in the previous year was not maintained.

Industries.—8. Spinning and weaving concerns were fully employed throughout the year—principally in meeting the orders of the Military authorities; the tanning and leather industries similarly enjoyed a period of exceptional prosperity, and the coir industries of the West Coast, at first adversely affected, recovered owing to the placing of large orders for coir screening for camouflage purposes in France. Rice factories, however,—especially in the northern districts—were hard hit by the shortage of rolling-stock and many were forced to close down. Factory sanitation made a marked advance, but with factories working intermittently or not at all there was no regular demand for factory labour, and factory wages, as compared with those outside, ruled low. In such a year the Department of Industries had of necessity numerous obstacles with which to contend: the shortage of rolling-stock, the scarcity of tonnage of all classes, the anxiety as to the supply of coal, and most of all the increasing extent of Government control, all made against the progress of industrial enterprise. The Government Pencil Factory and the Government Soap Works increased their outturn and profits to a considerable degree; but the energies of the department were naturally devoted mainly to war effort and war production and in such a year the development of indigenous industries other than those of military utility was unavoidably somewhat shelved. A second exhibition of Indian arts and industries, opened by His Excellency the Viceroy in December at Madras, attracted a very large number of exhibits, brought in a notable contribution to the War Fund, and, as emphasized in His Excellency's

opening speech, vindicated by its existence the policy of industrial development pursued patiently, though without encouragement, by this Government for a couple of decades.

Co-operative Societies.—9. The outstanding features of the year's working were the activities shown by agricultural societies and unions in the way of joint purchase and sale, the opening of new societies more especially among the weavers and fishermen, and the expansion and development of supervision by local unions. No great headway was made with the attempt to convert the Provincial Bank into a genuine federation, but its progress was otherwise satisfactory. New central banks were registered and made a satisfactory start upon their careers. The improvement in collection by agricultural societies previously noticed was maintained during the year, but the arrears still remain heavy. A movement was made to bring the Co-operative Credit Department more closely into touch with the Department of Industries and to define the functions of these two departments and the lines along which their joint efforts might most profitably be directed. It is gratifying to record that the attitude of the general public was cordial and helpful throughout.

Public Works and Railways.—10. The activities of the Public Works Department continued to be curtailed by the causes which have operated against them since the commencement of hostilities—shortage of transport by land and sea, control of materials and prohibitive cost. In spite of these disabilities and the highly creditable fact that no fewer than fifty officers of the department were on military duty during the year, a number of important projects were investigated and the detailed working-out of the principal schemes at present under contemplation proceeded. Two branch railways were completed and opened during the year.

Police: Criminal and Civil Justice.—11. A common consequence of a period of high prices and abnormal popular excitement is an uprush of petty crime, and this is naturally a distinguishing feature of the year under review. The number of murders was also high. Organized crime, however,—ever the principal object of police vigilance—was kept thoroughly in hand,—a circumstance which reflects no little credit on a force depleted in strength and harassed by the innumerable petty contingencies of an abnormal season. A pleasing feature of the year's administration was the close co-operation and mutual relationship of the police and village officers, which in the past has left so much to be desired. A notable case of the year was that in which a dismissed Revenue Inspector of Chingleput attempted to correspond with high German officials through the consuls of neutral powers in Bombay.

The majority of judges report that the jury system worked fairly satisfactorily. In the civil courts institutions still ran to a figure much in excess of that of 1914 ; there are indications, however, that the rush of litigation which followed the outbreak of the war in consequence of the natural anxiety of creditors to call in their outstanding debts has to some extent spent itself and it seems probable that the statistics of the next few years will show totals more nearly approximating to pre-war figures. There was a large and regrettable increase in the number of debtors imprisoned in execution.

Public Health.—12. Both the birth-rate and the death-rate exhibited a slight rise on the previous year ; the infantile mortality throughout the Presidency was distressingly high and steps are being taken, wherever possible, to combat this evil. Cholera and plague both claimed a toll of victims very much in excess of the previous years ; the latter disease has indeed given rise, by its outbreak in an apparently indigenous form, to a good deal of anxiety. The results of the year's work in vaccination were unsatisfactory, and an extension of the provisions as to compulsory vaccination is contemplated. The Medical Department was again exceedingly short-handed, only eighteen I.M.S. officers being on duty, of whom twelve had perforce to be posted to the Presidency town.

Municipal and Local Board Administration.—13. It is regrettable to observe that in the mufassal nearly one hundred meetings had to be adjourned for want of a quorum and that the average attendance of councillors continues to decrease towards the region of 50 per cent. The Madras Corporation proceeded with its activities in the direction of combating malaria along the approved lines.

Education.—14. The year was marked by the permanent retention of the Queen Mary High School, Vizagapatam, and the Ceded Districts College, Anantapur, by amendments in the Educational Rules relating to the classification of secondary schools and the incidence of teachers to pupils, and by the creation of research professorships open to qualified Indians in the Universities. Muhammadan and Panchama education continued to advance slowly. Literary activities proceeded along the accustomed lines. *New India* and the *Hindu* increased their circulation, but the Home Rule agitation called into being as a counter-blast three new papers—notably the non-Brahman organ *Justice* which joined in the controversy with much energy and bitterness. The rise in price of paper caused a decline in the mufassal press. The New India Printing Works were forced to forfeit security in August. Tamil was the leading literary language and at least one work of permanent value was published in that tongue. Publications, however, generally took the form of pamphlets, treatises on the somewhat indefinite theme of "politics", or crude detective tales, the influence of the cinema being in the last instance again evident.

General Condition of the People.—15. Allusion has already been made to the high prices of rice and cotton and their attendant effects, but on the whole the vast majority of the people were loyal, prosperous and contented. Public peace was well-maintained, and the clash of the Muharram and Dasara festivals gave rise to only a single serious disturbance. The difficulties which beset the tea and coffee planters of the Presidency eventually reached a more or less satisfactory solution. To combat the dispossession of the lands of the hill tribes in the Agency tracts in favour of the money-lending classes and to check the levy of extortionate interest an Act was passed to regulate the transfer of land and the rate of interest in these areas which is expected to have widely beneficial effects. Excise administration received particular attention during the year and a committee appointed to examine the liquor question

in the city of Madras arrived at the interesting conclusion that consumption was practically stationary and that drunkenness had not increased. Excise Advisory Committees were everywhere reconstituted to admit of a larger proportion of non-official members, and in the city of Madras gave way to a Licensing Board with enhanced powers. The experiment of introducing tea and coffee shops as a counter-attraction to liqour shops was generally a failure, but Government have realized that such ventures when backed by private enthusiasm have a distinct chance of success, and have accordingly promised subsidies in appropriate cases. The rural areas remained largely unaffected by the war—as by the political excitements of the period.

THE REPORT

CHAPTER I

PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES

1. *Vide* pages 1 to 10 of the Report on the administration of the Madras Presidency for the year 1911–12.

POLITICAL

HISTORICAL SUMMARY

2. *Vide* pages 11 to 33 of the Report on the administration of the Madras Presidency for the year 1911–12.

FORM OF ADMINISTRATION

3. *Vide* pages 34 to 54 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHARACTER OF LAND TENURES

4. *Vide* pages 55 to 60 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SURVEY

5. *Vide* pages 61 to 72 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SETTLEMENTS

6. *Vide* pages 73 to 86 of the Report on the administration of the Madras Presidency for the year 1911–12.

CIVIL DIVISIONS OF THE BRITISH TERRITORY

7. *Vide* pages 87 to 100 of the Report on the administration of the Madras Presidency for the year 1911–12.

DETAILS OF THE CENSUS OF 1911—TRIBES AND LANGUAGES

8. *Vide* pages 101 to 104 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHANGES IN THE ADMINISTRATION (1917–18)

9. There were no changes in the personnel of the Executive Government during the year.

THE MADRAS WAR FUND

10. With effect from the 1st June 1918 the Hospital Ships "Madras" and "Sikkim" were taken over by the Government of India and all obligations in regard to expenditure upon them by the Madras War Fund ceased from that date. The Fund, however, continued its activities in other directions or assumed new responsibilities and the demands on its resources and on the activity of the Ladies' Depot centres throughout the Presidency still remain considerable and will continue to expand with every addition to the number of units raised and to the number of hospitals or convalescent depots maintained in this Presidency. It has undertaken to supply, as far as possible, all Red Cross comforts required by the various military hospitals and convalescent depots for both British and Indian troops in this Presidency. There are at present 22 of such hospitals and depots and the work of supplying comforts to them has been carried on for some considerable time and is now fully organized. Ever since the Fund was established, it has from time to time supplied articles to various hospitals overseas. It was recently decided to discontinue this system of direct supply and to send definite quantities of the articles required to the Central Red Cross Depot at Bombay, which would assume all responsibility for distribution. Some of these articles were despatched and others were being made and collected by the various Red Cross centres, of which there are 83 in this Presidency. The Fund has been asked by the Indian War Works Committee to assist in supplying sundry articles for the recreation huts which have been and are being organized in Mesopotamia for British and Indian troops. It has also been sending regular supplies of comforts to those overseas units which are closely connected with the Madras Presidency. At the request of the Officer in charge of War Gifts, Baghdad, the Fund has undertaken to assist in supplying Christmas cheer for the troops in Mesopotamia. The collections made in the Madras Presidency on behalf of "Our Day" on the 12th December 1917 amounted to Rs. 6,10,089. This sum, which was credited to Madras in the "Our Day" accounts for all India, was specially retained for the maintenance of the two hospital ships. The transfer of these ships to the Government of India has placed the Madras War Fund in a position to offer to remit the amount to the Joint War Committee of the British Red Cross Society and the Order of St. John of Jerusalem, and His Excellency the Governor, as President of the Fund, has made the offer to His Excellency the Viceroy who has passed it on to the Joint War Committee. The total sum contributed by the Madras War Fund from the beginning of the war up to the 31st March 1918 was Rs. 68·35 lakhs.

HIS EXCELLENCY THE GOVERNOR'S TOURS

11. In May 1917, His Excellency the Governor visited the Malabar-Wynaad from Ootacamund by motor for a day and held a conference with the planters at Meppādi in regard to various matters affecting the planting industry. In June His Excellency attended the cattle show at Tiruppūr and presided at the prize distribution. On his way from Ootacamund to Madras in October, His Excellency visited Mangalore, Calicut, Madura and Trichinopoly. At Mangalore he held a Recruiting Conference and another conference on the subject of the development of railway communications affecting the South Kanara district, and received deputations from local planters, the South Kanara District Association, the Roman Catholics of Mangalore and the Muhammadans. His Excellency also visited several institutions, laid the foundation of the Mahila Sabha, and presided at the prize distributions at the St. Aloysius' College and at the Government College. At Calicut His Excellency held a Recruiting Conference and received deputations from the United Planters' Association of Southern India, the Kerala Jenmi Sabha, the Nambudri Yogakshema Sabha, the Calicut Municipal Council and the Manjeri Hidayut-ul-Muslimin Sabha. He also accorded many private interviews and visited several of the local institutions. On his way to Madura from Calicut, His Excellency halted for a few hours at Shōranūr to open an Ayurvedic hospital at Cheruthuruthi in the Cochin State. At Madura and Trichinopoly His Excellency granted several private interviews and visited various institutions. At Madura he received deputations from the Muhammadans of Dindigul, the Nadars and the Madura-Rāmnād Indian Christian Association and opened the North Masi Street Dispensary. At Trichinopoly he inspected the Indian detachment of the Indian Defence Force which was then undergoing training. In January 1918, His Excellency proceeded to Delhi on the invitation of His Excellency the Viceroy to attend the Conference of Heads of Provinces convened for the discussion of the proposed constitutional reforms. His Excellency visited Calcutta, Lucknow and Cawnpore en route and made a stay of six days at Delhi. On the return journey His Excellency spent a day at Ajmere and two days at Bombay. He visited the Colvin Talukdars' School at Lucknow and the Mayo College at Ajmere in connexion with the proposed establishment of a Rajkumar College in Madras. In response to an invitation from His Excellency Monsieur Martineau, Governor of the French Settlements in India, Their Excellencies Lord and Lady Pentland paid a visit to Pondicherry in February 1918. Visits were paid to the Rodier Mills of Messrs. Best & Co., the St. Elizabeth's Iron Works of Messrs. Gaudart & Co. and the Banque de l'Indo-Chine.

RELATIONS WITH TRIBUTARY STATES

TRAVANCORE STATE

(M.E. 1092—16TH AUGUST 1916 TO 15TH AUGUST 1917)

[*Report on the administration of the Travancore State for the year 1092 M.E.*]

[The Maharaja, His Highness Sri Padmanabha Dasa Vanchi Pala Sir Rama Varma Kulasekhara Kiritapati Manne Sultan Maharaja Raja Ramraja Bahadur Shamsher Jang, G.C.S.I., G.C.I.E., is a Kshatriya. His age is 61. He has a male heir. The area of the State is 7,129 square miles and the population according to the census of 1911 is 3,428,975. The annual subsidy paid to the British Government is Rs. 8,10,652. The gross revenue is estimated at Rs. 1,63,43,576. The strength of the military force maintained during the year was 1,466.]

General and political

12. In August 1917, His Highness the Maharaja went on a short tour to Cape Comorin and stayed there for a week.

Revenue and finance

13. The war continued to affect the revenues of the State adversely. Nevertheless there was an increase in revenue over that of the year 1091 by Rs. 10,64,190. This was general and was shared by all the main heads

of revenue, the receipts from Forest, Stamps, Excise and Customs reaching a higher figure than that of any previous year. Under Land Revenue the current demand was Rs. 35·71 lakhs against Rs. 36·54 lakhs in the previous year, but the collections rose from Rs. 35·50 lakhs to Rs. 35·70 lakhs. The volume of coercive action taken continued to increase under all the heads and this was again due to the prevailing scarcity of money. The expenditure of the Darbar rose from Rs. 156·24 lakhs to Rs. 165·17 lakhs due to increases under all heads. The latter figure, which includes the expenditure of Rs. 11·93 lakhs on the Quilon-Trivandrum Railway extension, exceeded the year's revenue by Rs. 1·74 lakhs resulting in the reduction of the Darbar balance from Rs. 45·57 lakhs to Rs. 43·83 lakhs.

Protection and legislation

14. Four ordinary meetings of the Legislative Council were held during the year and eight Regulations were passed by that body. The most important of these measures relates to intestate succession among Indian Christians in Travancore and the law relating to trading companies. The appointment of Inspector of motor buses was created during the year with a view to the more effective control of motor bus traffic.

Police

The actual strength of the police force at the close of the year stood at 1,872 against a sanctioned strength of 1,908. The percentage of judicial punishments was only 1·2 and the percentage of conviction of policemen prosecuted by private parties was much lower. There was a slight rise in the number of departmental punishments. There were no remarkable variations in the number of cognizable cases dealt with. The number of undetected cases showed an appreciable decrease, having been only 277 against 411 in the previous year.

Criminal justice

The number of courts which exercised criminal jurisdiction was 74, or one more than in the previous year. There was a slight fall (375) in the total number of offences reported which stood at 21,475. The number of offences under the Penal Code fell, by over 600, to 13,794, the decrease occurring mainly under theft, criminal force and assault. The number of juvenile accused fell from 274 to 185: and the ratio of those committed to the Reformatory to the number convicted was 50 per cent against 28 per cent in the previous year. The number of public servants prosecuted rose from 225 to 296, but the percentage of conviction fell from 5 to 2. Sixteen of the prosecutions were initiated by heads of departments and only one of these ended in conviction. The total number of cases for disposal by magistrates was 22,501, of which all but 690 were disposed of during the year. The number of cases pending for more than three months decreased from 51 to 45. There was no change in the percentage (80) of convicted persons who were sentenced to fines only. The number of magistrates with appellate jurisdiction continued to be 12. The number of appeals for disposal was 1,462 against 1,598 in the previous year. The number disposed of fell from 1,553 to 1,388, and the average duration of an appeal rose from 33 days to 37 days. The number of cases committed to Sessions Courts was 148 against 177 in the previous year, and there was no marked change in the percentage of convictions which stood at 50. The number of cases referred to the High Court rose from 5 to 11, but there was a fall both in the number of appeals (163 against 210) and revision cases (479 against 642) dealt with.

Prisons

At the commencement of the year there were 585 prisoners of all classes in the jails of the State. The number admitted during the year was 805 and the number discharged 810, leaving at the close of the year 559 convicted, 9 undertrial, 10 civil and 2 State prisoners, or a total of 580.

Civil justice

The total number of courts which exercised civil jurisdiction inclusive of the High Court and village panchayat courts was 52 against 44 in the previous year. The year opened with heavy arrears in the High Court and in some of the District Courts. Two temporary Judges and a temporary Additional Bench in the High Court were therefore constituted. Six village panchayat courts were also established during the year. There was an increase in all these courts of 2,391 cases under original suits and appeals together. In Munsifs' Courts the institutions fell from 70,308 to

69,595, the decrease occurring under small causes. Ordinary suits rose from 28,076 to 31,028. The disposals formed 75 per cent of the total number against 77 per cent in the previous year. The arrears increased, by 2,169, to 23,454. There was a rise both in the number of suits of between one and two years' pendency and in that of over two years' pendency. The average duration of contested suits rose from 9 months and 23 days to 9 months and 29 days. In District Courts also there was a rise in ordinary suits instituted and a fall in small causes. The average duration of contested suits rose from 15 months to 17 months and 1 day. Original litigation in the year under report was the heaviest recorded, being in excess of the previous year by 2,707 suits. The increase occurred exclusively in suits relating to land, the file of suits for money or movable property having slightly fallen. Of the appellate work before District Courts 54 per cent was disposed of against 46 per cent in the previous year. There was a rise in the average duration of all classes of appellate work. The High Court disposed of 57 per cent of first and second appeals against 41 per cent in the preceding year. There was a rise in the total number of documents presented for registration and in the aggregate value of the transactions. The ratio of the expenditure to the gross income was 38 per cent against 39 per cent in the previous year. Registration

15. The rainfall was 13·71 inches less than in the previous year. The season was, therefore, not very favourable to agriculture and there was a further advance in the prices of food-grains and the wages of labour. The Manager of the Experimental Silk Farm at Trivandrum was deputed to Upper India to study the latest methods of sericulture. The cultivation of mulberry was largely extended and several experimental broods of silk-worms were raised in the farms at Trivandrum and Tiruvalla. The silk school opened at Nanthancode under the management of the Salvation Army made good progress. The Agricultural Department was engaged throughout the year in various activities for the benefit of the ryots of the State who continued to evince increasing interest in agricultural progress generally. The number of factories at the end of the year was 109 against 94 in the previous year and the total number of operatives at work rose from 6,143 to 7,917 including 1,021 women and 1,380 children. An industrial survey of the State has been undertaken with a view to organizing a system of industrial and technical education, to promoting indigenous industries and to introducing such new industries as are likely to thrive under local conditions. As compared with the previous year there was an increase of about Rs. 41·35 lakhs in the value of exports, the principal commodities in respect of which this increase occurred being pepper, timber, tea and rubber, and a fall of about Rs. 21·60 lakhs in that of imports, the decrease occurring chiefly under rice, paddy, hardware and machinery. There was a decrease in the exports of most coconut products. There was little change in the relative proportions of the volume of external trade carried by the various routes, sea, backwater and land. The bulk of the trade, both exports and imports, was as usual with British India. The total expenditure on Public Works was Rs. 26·82 lakhs as against Rs. 27·23 lakhs in the previous year. The total capital outlay on the Kodayar Project amounted to Rs. 89,740. Against this a sum of over Rs. 91,069 was realized from the sale of tank-beds. The total expenditure on the project stood therefore at much the same figure as in the previous year, viz., about Rs. 80 lakhs. The total area under irrigation for which water-cess was levied was 53,544 acres against 45,541 acres in the previous year. There was no marked variation in the expenditure on the maintenance of main roads, which amounted to Rs. 4·50 lakhs, or in the average cost of maintenance, which was Rs. 178 per mile, or in the expenditure on new roads, canals and bridges, which stood at Rs. 5·14 lakhs. The Shencottah-Quilon Railway continued to be worked at a loss. The construction of the Quilon-Trivandrum extension was almost completed. The amount spent on account of the latter was Rs. 11·93 lakhs as against Rs. 10·49 lakhs in the

Production and distribution

Factories and industries

Trade

Public works

Railways

previous year, the total expenditure till the end of the year being Rs. 41·48 lakhs.

Vital statistics and medical services

Diseases

Vaccination

Medical relief

16. The total number of births registered during the year was 74,991 against 70,404 in the previous year and the number of deaths 48,241 against 46,707, the birth and death rates being 21·9 and 14·1 per mille against 20·5 and 13·6. There was a decrease in mortality from cholera and small-pox, the fall under the former being marked, while deaths from fevers and other causes showed a perceptible increase. The total number of vaccinations performed rose by over 3,800 to 206,852, but there was a fall in the number of infants under one year who were vaccinated, the percentage of these to registered births being 17 against 18·5 in the previous year. Twenty-seven hospitals, as in the previous year, and twenty-nine dispensaries, or three more than in 1091, were maintained. The total number of patients who obtained relief was 883,917 against 869,563, but the number of in-patients treated fell from 19,430 to 18,083. The number of midwives at work decreased by 2 to 47 and the number of cases of labour attended to by them worked to an average of 78 per midwife against 77 in the previous year.

Education

17. The principal features of the year were the provision of facilities for higher education in the vernacular, the opening of rural schools to impart elementary education to poor people near their homes, the training of men to give instruction in the lower forms of manual training in elementary schools, the initiation of measures to bring under departmental control the very large number of indigenous educational institutions ("pial schools") which exist in the State and the conversion of boys' schools into mixed schools for the education of boys and girls in localities where no educational facilities exist for the latter class. In order to induce the Muhammadan community to send their children in large numbers to the ordinary public schools Arabic munshis were appointed in 36 elementary schools of both grades and were sanctioned in three departmental higher grade secondary schools. Of the total population of the State, according to the census of 1911, 10·14 per cent were receiving instruction in recognized schools as against 9·31 per cent in the previous year. Taking unrecognized schools also into account the percentage was 11·7 against 10·62. The percentage of pupils attending recognized schools to the total population of school-going age was 67·61 against 62 in the previous year. Taking into consideration the strength in unrecognized schools also the percentage was 78·30 against 71·11. There was no change in the number of collegiate institutions affiliated to the University of Madras, which continued to be five. The strength of the colleges increased from 863 to 927. The number of recognized secondary schools rose by 7 to 86. One of the seven was a departmental institution and the other six private.

COCHIN 'STATE

(M.E. 1092—16TH AUGUST 1916 TO 15TH AUGUST 1917)

[*Report on the administration of the Cochin State for the year 1092 M.E.*]

[The Raja, His Highness Sir Sri Rama Varma, G.C.I.E., is a Kshatriya. He is 59 years of age and has male heirs. He pays a tribute of Rs. 2,00,089 and maintains a military force of 290 men. According to the census of 1911 the population of the State was 918,110. The gross revenue was Rs. 43·46 lakhs. The Resident for Travancore is also Resident for Cochin.]

General and political

18. The principal event of the year was the visit of His Highness the Raja to Delhi to attend the Conference of Ruling Chiefs held there under the presidency of His Excellency the Viceroy on the 30th October 1916 and succeeding days. His Highness availed himself of this opportunity to visit Bombay, Baroda and Ajmere on his way to Delhi and on the return journey he made halts at Agra, Allahabad, Benares and Calcutta and at certain important stations on the east coast of the Madras Presidency.

His Highness spent the hot weather (April to June 1917) at Coonoor, as usual, except for a short period when he returned to his State to attend the funeral ceremonies of his aunt, Her Highness the Senior Rani, who died on the 30th April 1917.

Revenue and finance

19. The actual gross revenue and expenditure during the year were respectively Rs. 46·36 lakhs and Rs. 43·46 lakhs leaving a net surplus of Rs. 2·89 lakhs. Compared with the actuals of the previous year the revenue showed a decrease of Rs. 1·81 lakhs. But this is only apparent as a sum of Rs. 1·70 lakhs due from the British Government on account of customs revenue under the Inter-Portal Trade Convention was not taken to account in the year, whereas it was credited to receipts in the accounts of the previous year. There was a fall of nearly Rs. 2 lakhs in forest revenue, but this was in large measure counterbalanced by a rise in railway earnings and salt revenue. After providing completely for all liabilities the State had at the end of the year a net surplus of Rs. 19·98 lakhs as against Rs. 17·09 lakhs at the beginning.

Protection and legislation

20. Four Regulations were passed during the year, including one amending the Criminal Procedure Code so as to admit of the appointment of honorary magistrates, and a large and varied programme of legislative measures was under consideration. Under the latter class comes a Regulation which has for its object the removal of disabilities under which certain classes of agriculturists are labouring.

Police

The police force consisted of 92 officers and 499 men against 91 and 495, respectively, in the previous year. Of this number 87 officers and 474 men were employed on purely executive work, the ratio of effective police to population and area being 1 to 1,636 persons and 1 to 2·52 square miles as against 1 to 1,651 persons and 1 to 2·54 square miles in the previous year. None of the men in the force were illiterate. There was a fall in the total number of departmental punishments awarded and a rise in the number of cases of good service which were recognized by promotion and otherwise. The total number of cases reported under the Penal Code and local and special laws decreased slightly from 1,206 to 1,179, and including the number with which the year opened there were 1,199 cases for investigation of which 98·2 per cent were disposed of as against 98·3 per cent in the previous year. The percentage of conviction of cases charged before the courts fell from 89·1 to 86·6. There was some decrease in the number of grave crimes reported during the year and a slight rise in the percentage of detection. The percentage of conviction rose from 81·7 to 85·2. The amount of lost property recovered was 68·94 per cent as against 53·10 per cent in the previous year. The average cost of a policeman was Rs. 196·38 as against Rs. 202·07 in 1091. The net cost per head of population continued to be two annas.

Criminal justice

There was no striking variation in the number of cases which came before magistrates or in that disposed of by them. Including arrears these amounted to 3,518 and 3,363 respectively. The percentage of conviction fell from 31·7 to 31·1. Appeals were filed in 27·7 per cent of appealable judgments of second-class magistrates against 26·2 per cent in the previous year, but the original decisions were confirmed in only 50·01 per cent of these as against 62·98 per cent in 1091. Sessions Judges had for disposal 44 appeals as against 26 in the previous year and disposed of all excepting one. The Chief Court disposed of all the appeals which came before it.

Prisons

The number of prisons which were maintained for the accommodation of prisoners remained the same as in the previous year. The admissions under all classes rose slightly to 443 convicts, 11 undertrials and 111 civil prisoners, and the daily average number was 134·08 against 113·08 in the previous year. The usual jail industries were carried on and they fetched a net profit of over Rs. 1,000.

Civil justice

The total number of suits instituted and appeals filed during the year was respectively 15,999 and 1,136, a slight rise under both heads over the figures of the previous year. There was however no proportionate increase in the number disposed of, which fell from 15,609 suits, and 1,036 appeals to 15,512 suits and 968

appeals. The pendency rose from 1,240 to 1,667 suits and there was a marked increase amongst them of cases which were over one year and over six months old. The percentage of the appealable decisions of the Munsifs appealed against and the percentage of such decisions confirmed on appeal were 12·53 and 53·1 against 11·08 and 52·73, respectively, in the previous year. Including the arrears the District Judges had 1,030 appeals for disposal against 982 in the previous year, but the number disposed of fell from 713 to 664. There was a satisfactory decrease in the average duration of contested regular and second appeals disposed of by the Chief Court, which was 160 days and 155 days, respectively, as against 267 days and 202 days in the previous year.

Village panchayats

Eight more village panchayats were organized bringing the total number to 25 having jurisdiction over 55 villages. Six of the early constituted panchayats were for the first time invested with judicial powers and they dealt with a considerable volume of judicial work. Some of these bodies showed commendable zeal and initiative in various useful directions such as the holding of rural exhibitions and assisting in the establishment of rural industrial schools.

Registration

The number of registration offices continued to be 21 and the number of documents registered rose by over 3,000 to 54,615.

Production and distribution

21. There was an increase of over 1,000 acres in the total area under cultivation, which amounted to 501,187 acres. The increase occurred mostly under dry, the area under wet rising only by about 200 acres to 207,477 acres.

Land revenue

Under Land Revenue proper the total current demand rose by about Rs. 2,000 to Rs. 10,74,033. The aggregate demand under all heads amounted to Rs. 11,63,347, of which the percentage of collection continued to be 99·9.

Agriculture

The Agricultural Department received special attention and did much useful work during the year. It was entirely reorganized, largely augmented and furnished with a definite programme of work to ensure orderly and systematic development. At its instance manurial and cultural experiments in paddy lands were tried by the ryots in several parts of the State. Trials were undertaken with good results in the cultivation of exotic varieties of paddy and the single seedling system of transplantation was adopted with considerable success. The department also supervised the cultivation of sugarcane, cotton and rubber conducted by private agencies, demonstrated to the ryots the use of improved varieties of agricultural implements and machinery and supplied them largely with seed, implements and manures. It continued the measures adopted in the previous year to combat the diseases of the arecanut palm and the coconut leaf.

Co-operative societies

Sixteen co-operative societies were registered during the year as against 15 in the previous year, and these include the first society registered for purely agricultural purposes. All but three or four maintained a generally high standard of efficiency and there was a marked improvement in punctuality of repayment. As in the previous year most of the loans issued by agricultural societies were for productive and useful purposes and these amounted to Rs. 52,046 as against Rs. 24,418 in 1091.

Forests

The system of selection felling and extraction of timber of specified girths continued to be followed in the working of the forests. The Darbar passed orders during the year on a scheme drawn up by the Working Plan Officer for the improved working of the Madugal reserved forests. This is the first working plan to be put into actual execution to regulate the working of such forests. The receipts fell from Rs. 5·89 lakhs to Rs. 3·97 lakhs, while the expenditure rose from Rs. 2·45 lakhs to Rs. 2·82 lakhs. The net revenue of the department amounted to Rs. 1·15 lakhs, against which has to be set off a sum of Rs. 1·24 lakhs, the expenditure under the Forest tramway which is debitable to the Forest Department.

Public works

The expenditure on State works was Rs. 5·71 lakhs against Rs. 5·17 lakhs in the previous year. The Committee appointed by the Darbar to formulate a scheme for the improvement of roads and waterways submitted their report during the year. The investigation of irrigation projects continued and the preparation of important schemes in one taluk was approaching completion.

Tramway

The total length of the permanent way opened up for traffic remained

the same as in the previous year, viz., a little over 52 miles. The cost of maintenance was Rs. 1·02 lakhs as against Rs. 1·15 lakhs in the previous year. The receipts from private traffic fell from Rs. 24,687 to Rs. 18,613. The South Indian Railway Company continued to work the State Railway. Railway
The gross receipts rose by nearly a lakh to Rs. 7·93 lakhs and the net earnings of the year gave a return of 5·54 per cent on the capital outlay as against 2·91 per cent in the previous year.

22. The number of births registered during the year (15,414) was almost the same as in the previous year, but the number of deaths rose from 10,037 to 10,297. The percentage of births to population was 1·67 as in the previous year and that of deaths was 1·12 as against 1·09. Public health continued to be satisfactory. There was a decrease, from 48 to 17, in the mortality from small-pox. The number of medical institutions was increased during the year from 27 to 28, the addition being an itinerating dispensary started in the Chittoor taluk. This institution did much useful work though started towards the close of the year and in addition to dispensing drugs, instructed the people in sanitation, the advantages of vaccination, the prevention of malaria and the precautions against cholera, plague and other epidemics. The total number of patients treated during the year by all institutions was 304,085 as against 289,283 in the previous year. The number of women and children treated by female medical subordinates rose from 40,779 to 59,189, the increase being due to the Trichur Maternity Hospital having worked during the year and to a female sub-assistant surgeon having attended the women patients of the Ernakulam General Hospital throughout the year. The training of the local midwives in the State hospitals continued. Attention was bestowed to the modernization of the chief medical institutions so as to render it unnecessary except in very special cases for subjects of the State to seek treatment elsewhere. The expenditure on medical relief was nearly Rs. 1·46 lakhs as against Rs. 1·44 lakhs in the previous year.

Vital statistics and medical services

Medical relief

23. The steady progress of the previous year in the Department of Education was maintained and the Darbar continued to insist on the priority of the claims of primary education to State aid over those of secondary and collegiate education, not less than 61·8 per cent of the total expenditure of the department having been devoted to that object as against 59·4 per cent in the previous year. The total number of State schools was 137 as against 133 in the previous year and that of aided schools rose from 177 to 193. The State institutions did 36·7 per cent of the educational work as against 35·1 per cent in the previous year. The number of pupils under instruction rose by nearly 5,000 to 79,232. The percentage of boys and girls under instruction to the male and female population of school-going age was 79·4 and 35·8, respectively, as against 75·5 and 32·8 in 1091. Upper secondary education was imparted in 16 schools as against 15 in the previous year. Of these the number of aided schools continued to be six, but the average cost to the State per pupil instructed rose from Rs. 9 to Rs. 14. There were 40 lower secondary schools as against 36 in the previous year, and 17 of these were aided. The number of schools in which primary education was given rose by 18 to 1,372. There were 69 schools for girls as against 63 in the previous year and the number of pupils attending these institutions rose by over 2,000 to 18,252. A grant of Rs. 1·33 lakhs as against Rs. 1·29 lakhs in the previous year was disbursed by the State and a sum of Rs. 9,502 was spent on stipends and scholarships.

Education

PUDUKKŌTTAI STATE

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Report on the administration of Pudukkōttai for fasli 1327*]

[The Raja, His Highness Sri Brihadamba Das Raja Sir Martanda Bhairava Tondaiman Bahadur, G.C.I.E., is a Kallar by caste and is 42 years of age. The population of the State according to the census of 1911 is 411,878. The Raja pays no tribute and maintains a military force of 110 infantry and 18 cavalry. The Collector of Trichinopoly is ex-officio Political Agent for the State.]

General and political

24. Throughout the fasli His Highness the Raja stayed in Australia with the Rani.

Revenue and finance

25. The receipts amounted to Rs. 20·03 lakhs as against Rs. 19·06 lakhs in the previous fasli. The increase of Rs. 0·97 lakh was contributed by almost all the principal heads of revenue, the bulk occurring under Civil Works and Interest. The total demand under Land Revenue was Rs. 9·64 lakhs against Rs. 9·81 lakhs in the previous fasli and a sum of Rs. 9·56 lakhs was either collected, written off or adjusted from over-payment made in the previous year, the percentage of collection to the demand being 99·08 as against 98·95 in the preceding fasli. The incidence of land revenue assessment per head of the population was Rs. 1–12–11. The land revenue charges amounted to Rs. 1·21 lakhs or 12·33 per cent of the actual collections against Rs. 1·13 lakhs or 11·57 per cent of the collections in the previous fasli. The total revenue under Salt and Abkári, inclusive of the contribution from the British Government, was Rs. 2·98 lakhs against Rs. 2·93 lakhs in the previous year and the expenditure amounted to Rs. 0·32 lakh against Rs. 0·31 lakh. The receipts from Stamps aggregated Rs. 2·31 lakhs as against Rs. 2·27 lakhs, the increase being chiefly contributed by the sale of non-judicial stamps. The total expenditure rose from Rs. 16·93 lakhs to Rs. 19·73 lakhs, the principal items which contributed to the increase being the special contribution of Rs. 1 lakh made to the Madras Hospital Ship and the net loss of Rs. 2·43 lakhs incurred in the conversion of 3½ per cent Government securities into the Indian War Loan of 1929—1947. The opening balance of the fasli was Rs. 30·63 lakhs and the closing balance Rs. 30·93 lakhs, out of which a sum of Rs. 19·94 lakhs was invested in the Indian War Loan and Rs. 9·25 lakhs in fixed deposits with the Bank of Madras.

Land revenue

Salt, Abkári and Stamps

Production and distribution

26. The total rainfall was 38·57 inches as against 33·57 inches in the preceding fasli and an average of 34·02 inches for the past five years. It was timely and well-distributed and the season was on the whole good and remarkably favourable for wet cultivation in all parts of the State although in many parts the dry crops suffered at the beginning of the fasli from excess and at the end from deficiency of rain. Of the total area of the State, about 67 per cent was available for cultivation, and 75·5 per cent of the latter was cultivated. As much as 39 per cent of the cultivated area was irrigated and 28·6 per cent was under rice. Notwithstanding the favourable season the prices of food-grains, with the exception of ragi, showed a tendency to rise. The condition of the labouring classes was, however, on the whole good. Considerable progress was made during the year in the Department of Co-operative Credit. The number of societies increased from 22 to 27, the membership from 4,194 to 7,132, the shares from 12,562 to 17,360 and the working capital from Rs. 3·79 lakhs to Rs. 4·90 lakhs. Inam survey work was almost completed during the fasli.

Season and crops

Protection and legislation

27. The Legislative Advisory Council met thrice during the year and passed seven Regulations. A proclamation to control tanning and tanning materials was issued by the Darbar. The sixteenth session of the Representative Assembly was held in September 1917. Twenty-two members were present out of a strength of thirty. There were 109 interpellations and six subjects were discussed. The police force consisted of a Deputy Superintendent, two Inspectors, 11 sub-inspectors, 28 head constables and 202 constables or one Inspector less and one head constable and seven

Police

constables more than in the previous fasli. There was still a shortage of 29 men against 36 men in the previous year. The Superintendent of Police, Trichinopoly, continued to be ex-officio Superintendent of the State Police. The number of cases of all kinds reported during the fasli decreased by about 100 to 2,052, those under the Penal Code falling correspondingly from 538 to 514. There was a slight improvement in the percentage of detection under both heads as also in that of the value of property recovered. Grave crimes fell from 312 to 262. Detective results somewhat improved but still left much to be desired. The system of abolishing circles and placing sub-inspectors under the direct guidance of the Deputy Superintendent was introduced during the year. It gives some promise of success and of better results in the future. Of the 19 magistrates (including the Town Bench) four (including the Chief Magistrate) exercised first-class powers, seven second-class powers, and eight third-class powers. The Court of the Special First-class Magistrate was abolished in the latter part of the fasli. The total number of cases for disposal in all these courts was 4,219 as against 4,011 in the previous fasli, and 4,058 or 96·18 per cent were disposed of as against 3,859 or 96·21 per cent. The percentage of conviction fell from 38·58 to 37·67. In the Court of Sessions there were ten cases for disposal including the two pending at the end of the previous fasli. Of these nine cases involving 12 persons were disposed of and eight persons were convicted. In the Chief Magistrate's Court there were 103 appeals and 54 revision petitions. All the latter and 98 of the former were disposed of. The Original Side of the Chief Court had eight appeals for disposal and the original decisions were reversed in no less than 50 per cent of these as in the previous year. On the Appellate Side there were eight criminal appeals for disposal, all of which were against the decisions of a single Judge on the Original Side in sessions cases. Seven appeals were disposed of, in six of which the original decisions were confirmed. There were 54 revision petitions, including the previous year's pendency, of which 48 were disposed of. There were eight prisons as in the previous fasli, viz., the Central Jail at Pudukkōttai and seven sub-jails. At the commencement of the fasli there were 77 prisoners, 288 of all classes were admitted and 306 discharged during the year, leaving at the close 59 prisoners, consisting of 51 convicts, three under-trials, four civil prisoners and one lunatic. The daily average of the jail population was 67·63 as against 60·79 in the previous year. The accommodation for the prisoners was sufficient and their health was good. There were no escapes. A sum of Rs. 537 was realized by the sale of garden produce and an income of Rs. 1,703 was derived from jail industries on an outlay of Rs. 6,722. The expenditure on the Central Jail amounted to Rs. 9,475 or Rs. 140 per head of the average daily population as against Rs. 126 in the previous year. The rise was due mainly to the purchase of larger quantities of food-grains. The tribunals which dispensed civil justice were, as usual, the Chief Court and its Registrar and eleven rural small cause courts. Including the cases pending at the commencement of the fasli and re-admissions, the number of original suits for disposal was 9,988 against 10,631 in the previous year. Of these 8,764 suits were disposed of and the pendency rose from 1,028 to 1,224 suits. Regular suits were tried by the Chief Court only. The number of such suits for disposal was 2,850 against 2,872 in the preceding fasli and 2,199 were disposed of. The number left pending at the end of the year rose from 565 to 651, of which 40 were pending for over one year and 363 for over three months. The percentage of disposal fell from 78·49 to 77·15. The average duration of contested suits rose from 164 days to 187 days. The percentage of disposal of small cause suits fell from 92 to 90·95, but the average duration of contested suits was 78 days as against 81 days in the previous year. In the Registrar's Court the percentage of disposal fell from 93·79 to 90·70 and the average duration of contested suits rose from 59 days to 65 days. There was a fall, from 95·37 to 93·02, in the percentage of disposals by rural Small Cause Judges. There was improvement both in the percentage of disposal and in the average duration of regular appeals. The

Criminal justice

Prisons

Civil justice

Local bodies

municipal council consisted of a paid chairman and eight councillors, of whom four were elected and the rest nominated. A general election was held in March 1918 and the new council entered upon its duties on the 1st April. Twenty-eight meetings were held or two less than in the previous year ; and five were adjourned for want of a quorum against seven in the previous year. The average attendance slightly improved and the attendance of non-officials was better than that of officials. The several conserved tanks in the town were carefully watched and preserved undefiled. Filtered water was as usual supplied to the main part of the town by means of pipes from a reservoir and the cost of pumping rose from Rs. 2,927 to Rs. 3,273. The Sanitary Engineer to the Government of Madras drew up a drainage scheme for the town during the year. Including the opening balance and excluding the State grant the municipal revenues of the year amounted to Rs. 67,711 and the expenditure to Rs. 55,623, leaving a surplus of Rs. 12,088. It is a matter for congratulation that the municipality was able to be independent of State aid. The number of union panchayats continued to be five and two had non-official chairmen. The total receipts including the State grant were Rs. 13,479 as against Rs. 8,564 in the previous fasli, and the expenditure was Rs. 11,117 as against Rs. 6,734. A sum of Rs. 2,290 was spent by the Revenue Department in the improvement and conservancy of drinking-water ponds and in sweeping and lighting the streets in a few of the larger villages.

Vital statistics and medical services

28. Cholera, from which the State was free in the previous fasli, prevailed in several parts and caused 501 deaths. Deaths from smallpox decreased from 309 to 209. There were no other epidemics. The total number of births was 7,805 as against 7,551 in the previous fasli and there was a regrettable increase, from 7,022 to 7,715, in the number of deaths. The number of medical institutions remained the same as in the previous year. There was a fall in the number both of in-patients and out-patients treated. In the case of the rural dispensaries this was ascribed to the prevalence of cholera in several parts of the State. The Town Hospital and the several dispensaries continued to do useful work and two trained nurses were added to the staff of the former. The total expenditure of the department rose from Rs. 0·53 lakh to Rs. 0·56 lakh. There was a slight rise in the total number of cases vaccinated, much of it occurring under revaccination, but the percentage of success fell from 92·24 to 91·18. The number of persons successfully vaccinated per mille of the population was 26·46 against 26·06 in the previous fasli.

Education

29. The total number of educational institutions at work in the State was 420 as against 407 in the previous fasli. Of these 188 schools and a second-grade college were under direct State management, and the number of private elementary schools which received grants-in-aid from the State increased from 152 to 161. There was a slight increase in the strength of all the schools, the total number of boys under instruction being 15,238, or 51·7 per cent of the male population of school-going age, against 14,029, or 47·58 per cent, in the previous fasli. There was one school for every 2·8 square miles of the area and for every 980 persons of the population. Elementary education is free throughout the State except for boys in the capital. Seventeen elementary schools were set apart solely for the education of girls, 13 of which were State schools and 4 aided. The Town Sirkar Girls' School was raised to the standard of a secondary school. The total number of girls under instruction during the year was 1,812 against 1,751 in the previous fasli. School boards were formed during the year at the headquarters of taluks to enlist the co-operation and sympathy of non-officials in the spread of free primary education. A competent teacher was appointed to inspect all the Muhammadan schools and to report from time to time on the progress made by them in the teaching of the Koran, Arabic and Urdu. The number of pupils on the rolls of the college fell from 663 to 631. The results in the intermediate examination were poor but in the secondary school-leaving

certificate examination the average marks obtained were above the Presidency average in all the subjects. The expenditure of the Educational Department exclusive of the college was Rs. 0·81 lakh against Rs. 0·77 lakh in the previous fasli. The expenditure on the college was Rs. 0·27 lakh against Rs. 0·24 lakh. The receipts from college fees remained the same as in the previous year, viz., Rs. 0·18 lakh.

BANGANAPALLE STATE

[*Administration Report of the Banganapalle State for the official year 1917–18*]

[Nawab Saiyid Ghulam 'Ali Khan Bahadur, a Muhammadan of the Shiah sect, is the ruler of the State. He is 44 years old and has male heirs. He pays no tribute and maintains no military force. The population of the State is 39,356 (1911 census). The Collector of Kurnool is Political Agent.]

General

30. The season was very favourable and agriculturists were highly benefited by timely rains, good crops and high prices of cotton and food-grains. The State was slowly recovering from the effects of the floods of October 1916. The construction of houses was proceeding in the devastated portion of Banganapalle town, which had been surveyed and mapped with broad streets ; but progress was slow owing to dearth of labour. Some reconstruction and repairs to the damaged portions of roads, culverts and slab drains were carried out, but much more remains to be done. The restoration of two of the chief irrigation bunds across the Zureru which had been completely washed away was commenced during the year. Preliminaries were arranged for the execution of repairs to the Jolapuram tank. A sum of nearly half a lakh of rupees was spent during the year on public works. The weaving branch of the Industrial Department was engaged during the year in a variety of activities. Industries. Exhibits were sent to four exhibitions and they were awarded a certificate of merit in one and three prizes in another, one for a carpet, the second for towels and carpets and the third for artificial silk cloth. A building for rearing silk worms was under rapid progress. Meanwhile sericultural operations were confined to the upkeep and extension of mulberry plantations.

Revenue and finance

31. The total receipts during the year were Rs. 2·74 lakhs against Rs. 2·69 lakhs in the previous year. The principal increase occurred under Land Revenue and was chiefly due to prompt collections. The total expenditure rose from Rs. 2·49 lakhs to Rs. 2·56 lakhs. A sum of Rs. 1,000 was contributed to the Madras War Fund besides the contribution of Rs. 4,200 to the Madras Hospital Ship Fund.

Protection

32. Much activity was shown by the police in the prevention of crime and in patrolling the roads. Detective work was, however, poor and the percentage of convictions of accused persons sent for trial fell from 30·3 to 18·75. There was a rise in the percentage of stolen property recovered which was 64·23 against 18·088 in the previous year.

Vital statistics and medical services

33. The year was most unsatisfactory as regards public health. Plague which broke out in Kurnool and Nandyal threatened the State but was kept out by precautionary measures. Cholera and fevers claimed many victims. The mortality, which was unprecedented, was 49·3 per mille as against 17·28 in the previous year. The State hospital continued to do good work, the daily average number of out-door and in-door patients having been 136 and 11, respectively, as against 116 and 8 in the previous year.

Education

34. Including the Lower Secondary School, Banganapalle, and two girls' schools, there were 26 State schools as against 27 in the previous year, one elementary school having been abolished in January 1917. The results of the annual examination were satisfactory, but the attendance continued to be discouraging. The daily average number present was

772 against 918 in the previous year, the number on the rolls being respectively 1,278 and 1,324. The fall is ascribed to the prevalence of sickness throughout the State. The number of mission schools which received grants-in-aid from the State rose from seven to nine and the number of State-aided private schools continued to be four.

SANDUR STATE

[*Administration Report of the Sandur State for the official year 1917–18*]

[The Raja of Sandur, Raja Srimant Venkatrao Rao Sahib, Hindu Rao Ghorapade Mamlukatmadar, Senapati, is a Mahratta. He is 26 years of age. He pays no tribute and maintains no military force. The population of the State is 13,517 (1911 census). The Collector of Bellary is ex-officio Political Agent and exercises a general supervision over the administration. He is also Sessions Judge for sessions cases and appeals.]

General and political

35. The Raja remained in the State during the whole year except for about a month which he spent at Bombay.

Revenue and finance

36. The chief sources of income are land revenue, forests, abkári and mines. No rents were realized under mines and none are expected until after the close of the war. Excluding this source the total receipts amounted to Rs. 68,571 as against Rs. 73,620 in the previous year. The former figure, however, does not take into account the amount realized as interest on loans and Government securities about which information was not available. The expenditure rose from Rs. 63,166 to Rs. 74,685.

Protection

Police

37. In order to improve the police force it is proposed to increase the strength from 32 to 40 and to raise the pay of constables. There were ten paid talaiyaris who were employed in the prevention and detection of crime in rural areas in addition to other work. These and the regular police combined gave a ratio of one man to every 282 of the population and every $3\frac{1}{2}$ miles of area and were sufficient for the maintenance of peace and order. There was no grave crime during the year, but the number of thefts and petty offences charged rose by about 40 per cent and the percentage of conviction fell from 87·5 to 72·09. The value of property stolen rose from about Rs. 400 to over Rs. 4,000, but the percentage of recovery was satisfactory having been 83·84 against 50·15 in the previous year.

Courts

The Diwan exercised first-class magisterial powers as usual and disposed of 171 out of 173 cases filed ; they were mostly thefts and other petty offences. There were no appeals or revision petitions before the Raja. As District Munsif the Diwan had 33 suits for disposal and disposed of 26, several of which were keenly contested. The three appeals pending in the Raja's Court were disposed of during the year and no original suit or appeal was filed.

Jail

The cost of maintaining the jail at Sandur, the only one in the State, was Rs. 59 and wages amounting to Rs. 42 were earned by the prisoners and credited to State funds.

Production and distribution

38. The total rainfall was 45·48 inches against 40·19 inches in the previous year and an average of the past five years of 34·38 inches. But the rains were not opportune and crops did not prosper. Cholam, one of the principal food-grains, was selling so abnormally high as to necessitate State interference in the matter of fixing its price. The poorer classes were however not seriously affected by these conditions as employment was plentiful, especially grass and fuel cutting in the forests, and wages were high. The forest revenue (Rs. 18,544) remained much the same as in the previous year. The work of the agricultural bank was not satisfactory, but measures were taken to render it popular and really helpful to the ryots.

Vital statistics and medical services

39. Public health was generally fair. Cholera brought by pilgrims from the Hampi festival in Hospet prevailed in a few villages in a sporadic form but was soon stamped out. A few villages were infected with plague, imported from Bellary, Hospet and Kudligi in November, but evacuation was prompt as the villagers understand the advantage

of this from past experience and the disease completely disappeared in February. In consequence of this evacuation of villages the number of patients who received medical relief in the State dispensary at Sandur fell by nearly 1,000 to 10,718. The number of labour cases conducted by the midwife also decreased for the same reason from 151 to 126. The ratios of births and deaths rose to 36 and 31 per mille from 27 and 20 in the previous year.

40. There were thirteen elementary schools of which two were opened during the year. Two of these were Muhammadan schools, one a girls' school maintained by the London Mission Society with a grant from the Darbar and three were maintained from the funds of the local Hindu temple. The rest were State schools. There was no marked variation in attendance or in the cost of maintenance of these institutions. **Education**

CONDITION OF THE PEOPLE

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Season and Crop Report for fasli 1327 (1917–18)*]

41. The harvest price of rice was cheaper than in the previous year in twelve districts, dearer in eleven, and stationary in two; that of ragi was cheaper in six of the districts in which it formed the principal food-grain, dearer in thirteen, and stationary in one; the price of cholam was higher than in the previous year in thirteen districts and stationary in one; while cumbu was cheaper in six districts, dearer in seven and stationary in two. The prices of cholam were above the warning rates in three districts, but in no district did the harvest prices of the principal food-grains reach the scarcity rates. The chief feature of the year was the extraordinary rise in the price of cotton in sympathy with the rise in America. This rise took place in spite of the difficulty of exporting, a very strong local demand having arisen, especially for the longer staples, from Indian mills, which required this cotton to spin the finer and stronger yarns, which had previously been spun from imported American cotton. The cotton crop was short all over India and this tended to keep the prices up. One effect of this rise was that some ryots and dealers were tempted to sell their crop forward in December. The crop proving a short one and the prices steadily going up against them, many of these were unable to produce cotton against their contracts or —even, if able to do so,—found it much more profitable to allege that they were unable and to sell their cotton for cash at the higher price. The local cotton markets were thus much demoralized. On the whole, however, the ryots obtained a fair share of the profits due to the increased price and agricultural labourers obtained their share also in the shape of increased wages. Ryots were thus induced to put every possible acre under cotton and in the south much Cambodia was grown as a second crop on wet lands. This naturally led to a scarcity of fodder and to some extent of food-grains. The area under groundnut was some 21 per cent lower than in the previous year. A number of new markets were exploited during the year and the crop was absorbed without difficulty. From February 1918 prices steadily rose, and it was clear that the market was recovering from the shock caused by the stoppage of exports to France in 1916. Indigo was badly hit by the lack of export and prices fell considerably. There was a slow recovery of the market since January 1918 owing to increased exports to Japan and China. The price of rice was steadily rising throughout the year not on account of wholly local shortage but in general sympathy with the rise in price of cotton and other commodities and also because of the lack of freight. Much rice was imported into the Ceded districts to take the place of cholam which was badly damaged by heavy rains and disease and was consequently selling high. The outstanding feature of the year was the rapidly increasing

prices which everywhere upset rural economics. In the cotton tracts the actual ryots and the middlemen made very good profits and the cooly classes were getting excellent wages up to 8 annas per day for men in the Ceded districts and 4 to 6 annas per day for women in Tinnevelly. But the cost of food-grains and clothing was rapidly increasing also and there can be no doubt that the working classes were feeling the pinch in many places owing to the rise of wages not keeping pace with the rise in the cost of living. Similarly in the rice tracts all actual producers benefited, but the cooly classes, although securing sufficient actual food from their wages paid in kind, were hard put to it to purchase cloths. The west coast suffered owing to the failure of the staple product—the coconut—to rise in price in sympathy with other produce.

POLITICAL PENSIONS (1917)

42. The political pensions in force on the 1st January 1917 amounted to Rs. 2,99,362–12–0 per annum and were distributed among 478 pensioners. During the year pensions amounting to Rs. 9,095–8–0 were either newly sanctioned or were transferred from other provinces, and pensions amounting to Rs. 29,463–13–0 either lapsed or were transferred to other provinces. Twenty-three pensioners died during the year and 22 new pensioners were added to the list. The pensions of two persons were commuted in full and that of a third in part. The pensions in force on the 1st January 1918 amounted to Rs. 2,78,994–7–0 and were distributed among 475 pensioners. The payments made to Carnatic stipendiaries and to the Tanjore family aggregated Rs. 2,00,851–11–0 and Rs. 38,321–3–5 respectively. The former amount includes the commuted value of the three pensions referred to above.

CHAPTER II

ADMINISTRATION OF THE LAND

REALIZATION OF LAND REVENUE

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917)

[*Report on the settlement of Land Revenue for fasli 1326*]

Sources of land revenue
Peshkash
Shrotriyam jodi
Ryotwari

43. Of the five sources from which the Government derived their land revenue there was little variation under peshkash or revenue from permanently-settled estates, which amounted to Rs. 49·88 lakhs against Rs. 49·87 lakhs in the previous fasli, and shrotriyam jodi or quit-rent levied on inam villages which remained at much the same figure as in the previous fasli (Rs. 7·57 lakhs). The net ryotwari demand rose by Rs. 9·27 lakhs to Rs. 641·18 lakhs. Increases occurred under assessment on holdings (Rs. 1·33 lakhs), water-rate and second crop charge (Rs. 3·25 lakhs), remissions (Rs. 0·95 lakh) and miscellaneous revenue (Rs. 5·64 lakhs). The total extent of ryotwari holdings during the year was 25·79 million acres or an excess of 112,570 acres over that of the previous year. The increase was marked in Anantapur, South Kanara and Malabar, due in the first two districts to the extensive assignment of waste lands on darkhast and in the third to the transfer of "unoccupied dry" lands to "occupied dry." The total assessment on holdings rose from Rs. 518·17 lakhs to Rs. 519·51 lakhs. The increase was marked in Madura, South Kanara and Malabar, which together contributed about 50 per cent of the total. In the first-named district it was due mostly to the introduction of the resettlement rates of assessment in the Periyakulam taluk and in the others to expansion of cultivation. There was a decrease of 91,346 acres under dry and an increase of 28,707 acres under wet, or a net decrease of 62,639 acres in the total area cropped on ryotwari holdings which amounted to 20·478 million acres. Dry waste charged showed an increase of 197,202 acres, wet waste charged showed a decrease of 21,280 acres and wet waste remitted fell by 678 acres. Including the area under "miscellaneous" cultivation, the total area cropped amounted to 21·74 million acres against 21·81 million acres in the previous year. The revenue from water-rate and second crop charge rose from Rs. 34·78 lakhs to Rs. 38·03 lakhs. Remissions and deductions amounted to Rs. 16·62 lakhs against Rs. 15·66 lakhs in the previous fasli. Season remissions showed an increase of Rs. 1·18 lakhs, while fixed remissions and beriz deductions showed decreases. The remissions under "waste remitted" amounted to Rs. 1·80 lakhs or Rs. 0·04 lakh more than those of the previous year. Under "shavi" or short crop the total remissions amounted to Rs. 1·37 lakhs or an increase of Rs. 0·52 lakh over the previous year's figure. Almost the whole of this related to wet lands. A remission of Rs. 1,600 was granted under "short crop." As "tirvakammi" (difference between wet and dry rates of assessment on wet lands cultivated with dry crops owing to insufficiency or failure of the water-supply) a sum of Rs. 1·59 lakhs was remitted against Rs. 1·87 lakhs in the previous year. The amount remitted on account of "injury by floods" rose by Rs. 0·84 lakh to Rs. 1·53 lakhs, Kistna alone showing the largest increase of Rs. 0·98 lakh. Fixed remissions (abatement of the demand granted for reasons unconnected with the season) amounted to Rs. 1·21 lakhs against Rs. 1·30 lakhs in the previous year. "Beriz deductions" (deductions made from village collections in favour of inamdars

Remissions

and religious institutions) fell by Rs. 13,300 to Rs. 8·97 lakhs. Most of this decrease was contributed by Tinnevelly owing to the decrease in the payment of tasdik allowance.

Miscellaneous revenue

The receipts under "Miscellaneous revenue" amounted to Rs. 100·25 lakhs against Rs. 94·61 lakhs in the previous year. The increase was mainly derived from the sale-proceeds of lands, under which head Madras showed the largest increase, viz., Rs. 2·46 lakhs. This was due in the main to the sale of Badsha Sahib's buildings. Kistna came next with an increase of Rs. 1·09 lakhs due to the sale of tank bed and assessed waste lands under the Divi pumping system. Other items under which increases occurred were water-rate on minor inams in ryotwari villages (Rs. 0·52 lakh), charge for water in zamindari and inam villages including tirvajasti and fasaljasti (Rs. 0·36 lakh), revenue from tree pattas (Rs. 0·78 lakh), rent of lankas (Rs. 0·48 lakh) and other items (Rs. 0·55 lakh). On the other hand there was a decrease of Rs. 0·68 lakh in the revenue derived from enhanced charges imposed on encroachment of porambokes.

Cesses

The current demand under cesses rose from Rs. 71·61 lakhs to Rs. 73·16 lakhs. The increase occurred in permanently-settled estates and whole inam villages and also under ryotwari and miscellaneous. In the case of the first two it was marked in Vizagapatam and was due to the introduction of a railway cess during the fasli, to the triennial revision of land-cess on permanently-settled estates and to the revision of assessments consequent on the survey and classification of whole inam villages. The increase under the last item mainly followed the increase in the revenue.

Collections

44. Including both arrears and current the balance outstanding on the 1st July 1917 was Rs. 12·06 lakhs. Up to the end of October 1917, Rs. 9·46 lakhs or 78·5 per cent had been collected, Rs. 3,905 written off the accounts and Rs. 791 held to be irrecoverable. The net recoverable balance on 1st November 1917 was Rs. 2·55 lakhs. The charges of district administration including salaries and allowances of revenue inspectors but excluding those of village establishments amounted to Rs. 52·67 lakhs or 6·8 per cent of the land revenue and cesses realized. The ratio was the same as in the preceding year. The village service charges (including proprietary estates) were Rs. 55·75 lakhs. Including this sum the total charges amounted as in the preceding fasli to about 14 per cent of the collections of land revenue and cesses.

Coercive processes

45. There was a further decrease in the number of processes issued during the year for the realization of Government dues which fell by about 170,000 to 1,123,483. The number of demand notices issued decreased in eighteen districts and increased in seven districts. The increases were marked in Kurnool and Madura due in the case of the former to the poorness of the harvest and in that of the latter to exceptional promptness on the part of the taluk officers in the collection of revenue. The number of distraints or attachments fell by 18,230 to 61,216. There was again a decrease in the percentage borne by the number of distraints and attachments to that of demand notices as compared with the previous fasli. The number of defaulters whose immovable property was attached further fell from 14,871 to 11,520. The number of defaulters whose property was sold was greater than in the previous fasli. The percentage of actual sales to sale notices was 5·55 against 4·22 and the percentage of defaulters whose property was actually sold to the total number of pattas was ·06 against ·05 in the preceding fasli. Immovable property of the estimated value of Rs. 1·65 lakhs was sold for the recovery of arrears amounting to Rs. 0·25 lakh and realized Rs. 0·58 lakh. The prices fetched were higher than in the previous year both in the case of wet and dry lands. The total area of lands bought in by Government for want of bidders decreased both under dry and wet from 3,025 to 2,071 acres in the case of the former and from 361 to 244 acres in the case of the latter.

Transfer of registration

46. The number of applications for transfer of revenue registration received through officers of the Registration Department rose by 42,309 or 17·43 per cent to 285,052. The increase was especially large in North

Arcot, Trichinopoly, Coimbatore, Tinnevelly and Rāmnād. The number of applications presented direct to revenue officers fell by 7,980 or 11·34 per cent to 62,392. The number of cases which revenue officers dealt with on their own initiative also fell by over 7,000 to 20,316. The largest decrease (nearly 4,500) was in Tanjore. The total number of applications received under all the three heads specified above together with the number pending disposal at the beginning of the fasli was 449,298 ; of these 344,769 were disposed of, leaving a balance of 104,529. Of the total number disposed of, 5 per cent were rejected and the rest accepted.

Loans and advances

47. An aggregate sum of Rs. 7·44 lakhs as against Rs. 7·51 lakhs in the previous year was advanced under the Land Improvement and the Agriculturists' Loans Acts. The fall is the net result of decreases in fourteen districts and of increases in nine districts. Of the sums repayable under these Acts on account of principal 91·2 per cent under the Land Improvement Loans Act and 86·8 per cent under the Agriculturists' Loans Act were collected. Advances amounting to Rs. 21,479 and Rs. 20,709 under the two respective Acts were repaid by borrowers on account of loans the repayment of which had not fallen due, while sums amounting to Rs. 865 under the first Act and Rs. 620 under the second were written off as irrecoverable. The aggregate amount of principal and interest repayable during the year under both the Acts was Rs. 11·31 lakhs. Out of this amount Rs. 3·17 lakhs or 28·0 per cent were collected without resort to coercion, Rs. 6·31 lakhs or 55·8 per cent after the issue of demand notices and Rs. 0·56 lakh after attachment but before sale. Over Rs. 3,500 were collected by the sale of movable property and a slightly smaller sum, or Rs. 10,000 less than in the previous year, by that of immovable property. The balance outstanding at the end of the year was Rs. 1·20 lakhs, the arrears being heaviest in Madura, Tanjore and South Arcot. With the aid of loans under the Land Improvement Loans Act, 362 wells capable of irrigating 1,782 acres of land were constructed during the fasli at an aggregate cost of Rs. 1·10 lakhs against 433 wells in the previous year, and 200 wells (against 326) were repaired. A sum of Rs. 23,930 was spent on the reclamation of 660 acres, Rs. 7,970 on the purchase of oil-engines or pumps and Rs. 27,384 on other improvements. The largest number of wells constructed and repaired was in the Coimbatore district. Under the Agriculturists' Loans Act 7,810 head of cattle were purchased at an aggregate cost of Rs. 4·62 lakhs and 78 houses were rebuilt. Seed-grain was purchased for Rs. 1,527 and a sum of Rs. 27,968 was spent for other purposes.

SURVEYS (1917–18)

[*Report on the administration of the Survey, Settlement and Land Records Departments for the year 1917–18 (G.O. No. 3261, Revenue, dated the 17th September 1918)*]

Operations

48. All the parties (including one solely employed on estate surveys) and the two town survey detachments which were at work in the previous year continued their operations. These operations consisted mainly of the cadastral resurvey of Government tracts in Guntūr, North Arcot, South Arcot, Tanjore, Madura and Rāmnād. They also comprised the cadastral survey of Government lands excluded from former surveys or only topographically surveyed in three districts and of proprietary estates in eleven districts ; the special cadastral survey of towns in ten districts ; the block survey of whole inam villages in one district ; the correction of topographical details in revenue maps of municipal towns ; the collation and arrangement of Madras Survey traverse records and the preparation of one-inch outline sheets for the Survey of India and the publication of maps.

Parties

District operations

No. I Party

49. No. I Party was employed in the Northern Circars. In Ganjām its outturn comprised the cadastral survey of 51 square miles in two proprietary estates and of 2 square miles of disafforested blocks in a reserved forest. Eighty-one out of a total of 95 linear miles of roads passing through non-Government areas were also surveyed, the final survey of the boundary between Dharakota and Bodogodo was carried out and an area of 6 square miles in the former estate was credited on completion of mapping. In Gōdāvari the experimental survey of two selected villages was conducted in the Nugur taluk. In Kistna an area of 15 square miles in Mirzapuram-Medur estate was credited. In Guntūr 109 square miles in Tenali and 230 square miles in Rēpalle were re-surveyed and street surveys were completed in six unions and were in progress in five others. The Town Survey Section credited in all 14·27 square miles in Parlākimedi, Chicacole, Vizianagram, Vizagapatam, Cocanada and Ellore. All the towns were finished excepting the last

No. II Party

two. In Nellore and Guntūr No. II Party finished under the Punganūr system the taluks of Pellur, Darsi and Marella. In addition it surveyed 6 square miles in Mallam taluk and the Yedlurpadu shrotriyam. In Cuddapah half a square mile of irrigable area in three shrotriyams in Cuddapah and Proddatūr taluks were finished. In Chittoor 11 linear

No. III Party

miles of roads in Kārvetnagar were finished. The outturn of No. III Party comprised the resurvey of 111 square miles in Tirumangalam taluk, Madura district, and the cadastral survey of 2·6 square miles in Erasakkanayakkanūr zamindari and 35 square miles in devasthanam villages. Street surveys were completed in two unions. In Rāmnād 32 square miles were resurveyed in Aruppukkōttai and Paramagudi and 29 square miles in Settūr and Raghunathapuram estates were surveyed cadastrally. In South Arcot 198 square miles were resurveyed in Gingee

No. IV Party

taluk. The cadastral section of No. IV Party finished the resurvey of the Mēlūr taluk, Madura district, the year's outturn being 201 square miles, completed 0·59 square mile out of 1 square mile in Inam Ramayyanpatti in Dindigul taluk and credited 7 out of 37 square miles in certain whole inam villages taken up for block survey. Street surveys were completed in the Chinnalapatti union and 16,988 supplemental subdivisions were measured in the Dindigul and Mēlūr taluks by surveyors placed at the disposal of the Special Settlement Officer. In Rāmnād street surveys were completed in five unions. The records of the Pāmban Island were received back from the Raja of Rāmnād after final check, but it was observed that this check was more a revision of the survey. A conference was accordingly held by the officer in charge with the Diwan and leading ryots at Mandapam and it was agreed that the survey registry should follow more or less the state of affairs which prevailed during the initial survey and prior to the final check. In North Arcot the resurvey of Tiruvannāmalai taluk was conducted under the Punganūr system, the special staff and the Survey Party working concurrently and 162 square miles were completed. The Town Survey section worked in Tinnevelly extension, in Tuticorin, in Māyavaram extension, in Madura extension, in Bodinayakkanūr, in Srīvilliputtūr, in Coimbatore extension, in Dhārāpuram and in Chingleput, finished all but the last two and credited 8·01 square miles in all. The section was also entrusted with the survey of streets in four unions in the "triangles" taluks of the Tanjore district and work was in progress in all these. As in the previous two years the scene

No. V Party

of operations of No. V Party lay almost exclusively in the South Arcot district where it surveyed 412 square miles. The cadastral survey of Chennappanayakkanpalaiyam and Naduvirappattu estates was taken up and 4 square miles credited. Street surveys were finished in Tindivanam and Valavanur unions. In North Arcot the survey of Marudalam-Muttavadi mutta was taken up late in the year and 1 square mile

No. VI Party

finished. No. VI Party resurveyed 1 square mile in Mannārgudi, 101 square miles in Tanjore South, 25 square miles in Pāpanāsam, and 27 square miles in Nannilam. The cadastral survey of 21 square miles of the Palace estate lands was also finished and street surveys were completed

in three unions. Further work could not be carried on in the Tanjore district for lack of stones and the Party moved to North Arcot where it resurveyed 221 square miles in Tiruvannāmalai. In Trichinopoly the cadastral survey of the Agraharavalavandi estate was completed, the area credited during the year being 14·5 square miles.

50. The area of village maps printed during the year was 5,002 square miles, including 344 square miles of proprietary estates and 97 square miles of Coorg Province, as against 4,295 square miles printed in the previous year. The arrears of printing at the end of the year were 5,172 square miles as against 7,270 square miles in the preceding year. There was a marked improvement in the printing output at the Central Office. **Central Office**

51. The total cadastral outturn for the year comprised the initial survey of 565 square miles in estates and 3 square miles in Government villages, the resurvey of 1,830 square miles of Government land, the block survey of 7 square miles of whole inam villages, and the survey of streets in 19 unions as well as of 92 linear miles of roads. The Town Survey Detachments completed on the detailed system the survey of seven towns and of extensions to four towns and partly finished or commenced work in four others. The gross expenditure was Rs. 11·81 lakhs, of which Rs. 8·51 lakhs is chargeable to Government and Rs. 3·30 lakhs to proprietary estates, municipalities, etc. The amount chargeable to outturn was Rs. 10·89 lakhs. **Outturn and outlay** Finance

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SETTLEMENTS (1917–18)

[*G.O. No. 3261, Revenue, dated the 17th September 1918*]

52. All the five settlement parties which were at work at the end of the previous year continued their operations. The work of the old Settlement Party No. I in the North Arcot district having been completed by the end of the previous year its designation was attached to the Special Settlement Officer, Tanjore, and its establishment transferred to Party No. II, which continued its work in South Arcot, Trichinopoly, Coimbatore and Salem and in the Tiruvannāmalai taluk of North Arcot. Party No. III worked in Chittoor and Bellary, No. IV in Madura and Rāmnād and No. V in Ganjām, Vizagapatam, Gōdāvari, Kistna and Nellore. A Special Settlement Officer was at work in connexion with the preparation of a scheme report for the resettlement of the Nilgiri and Malabar Wynaads. **Parties**

53. In Ganjām rough pattas were issued in the resumed inam villages of Bejjiputti and Kumarasingi in the Kallikota estate and in the twelve whole inam villages of the Karakavalasa estate. The classification of the resumed inam village of Bālājipuram in the Parlākimedi maliahs was completed and the localization and classification of Paiks' inams in the Pondakhōl mutta was started. In Vizagapatam the revision of adangals was completed in 126 villages of the Palkonda taluk, nine villages of the Sarvasiddhi taluk and three villages of the Golgonda taluk ; while subdivisions were measured in 95 villages of the Palkonda taluk. Progress was made in the collection of materials for a scheme report for the resettlement of the three ryotwari taluks of the district. Fair adangals for 770 whole inam villages of the district and for the resumed inam village of Kilantra were prepared and handed over to the Revenue Department. In Gōdāvari the classification of the agraharam village of Chikkullapālem was completed and a report on the results of the classification submitted. The diglot registers of three resumed inam villages in the Peddāpuram taluk and a report on the introduction of the settlement in those villages were also submitted. The fair adangals of the **Districts** Ganjām Vizagapatam Gōdāvari

two whole inam villages in the Gūdūr taluk of the Nellore district were handed over to the Revenue Department. The diglot registers of the

Nellore resumed inam villages of Pentapādu in the Gūdūr taluk and of Ramapuram in the Kāvali taluk and reports on the introduction of settlement

Bellary in those villages were submitted. In the Bellary district materials were collected for a scheme report for the resettlement of Adōni, Alūr and Siruguppa taluks. The revision of adangals was completed in 93 ryotwari and two shrotriyam villages of the Adōni taluk and subdivisions were measured in 108 ryotwari and two shrotriyam villages. The diglot register

Chittoor of one shrotriyam village in the Palmanēr taluk of the Chittoor district

North Arcot was submitted. In the Tiruvannāmalai taluk of the North Arcot district the revision of adangals was finished in 166 villages and a scheme report

South Arcot for the resettlement of the taluk was submitted. In the South Arcot district the revision of adangals was completed in the remaining 169 villages of the Tirukkōyilūr taluk and in 132 villages of the Kallakurchi taluk. The final scrutiny of survey records was carried out in respect of 185 villages of the Tindivanam taluk and in the remaining five villages of the Cuddalore taluk and 148 villages of the Villupuram taluk. Field inspection preliminary to the introduction of resettlement was completed in the remaining 24 villages of the Cuddalore taluk, in all the 279 villages of the Villupuram taluk, and in 53 villages of the Tindivanam taluk. Rough pattas were issued for 141 villages in the Cuddalore

Tanjore taluk and objections thereto heard in 101 villages. In Tanjore the revision of adangals was completed in the remaining 102 villages of the Nannilam taluk, in 85 villages of the Negapatam taluk and in one village in each of the taluks of Kumbakōnam and Pāpanāsam. Rough chittas were issued for the remaining 51 villages of the Māyavaram taluk and the final check of survey records was completed in all the

Trichinopoly villages of the Mannārgudi taluk. In the Trichinopoly district the fair accounts of all the remaining villages of the Trichinopoly and Nāmakkal taluks except those included within the municipalities of Trichinopoly and Srīrangam were handed over to the Revenue Depart-

Madura ment. The diglot registers of 65 villages in the Palni taluk of the Madura district were submitted. The scrutiny of survey records was completed in 115 villages of the Madura taluk, 69 villages of the Mēlūr taluk and 127 villages of the Tirumangalam taluk. Field inspection preliminary to the introduction of resettlement was finished in the remaining 2 and 41 villages, respectively, of the Dindigul and Nilakkōttai taluks and in 93 villages of the Madura taluk, 25 villages of the Mēlūr taluk and 59 villages of the Tirumangalam taluk. Resettlement rates were introduced in the Periyār-affected villages of the Periyakulam taluk, the whole of the Dindigul taluk, and 29 non-Periyār villages of the Nilakkōttai taluk. The fair accounts of 4 villages of the Periyakulam taluk, of all the villages of Dindigul taluk, and of 29 villages of the Nilakkōttai taluk were transmitted to the Revenue Department. A scheme report for the resettlement of the four ayan villages in the Paramagudi taluk and of eight villages in

Rāmnād the Aruppukkōttai taluk of the Rāmnād district was submitted. Diglot registers were prepared for 16 of the 22 resumed inam villages in the Rāmnād and Sivaganga zamindaris. The fair accounts of the Jarugu-

Salem malai hill villages in the Salem taluk were handed over to the Revenue Department and a report on the introduction of settlement was submitted.

The Nilgiris Malabar Enquiries into the economic conditions of the Nilgiri and Malabar Wynaads were carried out and some progress was made in the collection of materials for the compilation of a scheme report. A preliminary report was submitted in regard to the lines on which the resettlement should be conducted.

Registers 54. During the year 144 manuscript registers were received, 568 were scrutinized, 1,473 were printed and 1,359 issued to Collectors.

Finance 55. The total expenditure was Rs. 4·67 lakhs against Rs. 5·52 lakhs in the previous year. A sum of Rs. 1·26 lakhs was spent on the controlling

office against Rs. 1·46 lakhs in the previous year. The cost of printing and binding settlement registers also fell from Rs. 0·61 lakh to Rs. 0·54 lakh and the expenditure on settlement parties from Rs. 3·46 lakhs to Rs. 2·87 lakhs.

LAND RECORDS (1917–18)

[*G.O. No. 3261, Revenue, dated the 17th September 1918*]

General

56. Land Records staffs were employed throughout the year in all the districts of the Presidency, and in most districts efforts were concentrated on regular maintenance work. In South Arcot, however, where resurvey and resettlement operations were in progress the Land Records staff was mainly engaged in the overcheck of current subdivision work and in the inspection of maintenance accounts and registers of taluk offices. The year was, generally speaking, one of steady and continued progress. As the result of stricter scrutiny there was improvement in the quality of work turned out. There was a fall in the number of cases of patta transfer wrongly rejected and the details of acquisition procedure were attended to with more care than in the past. Topographical work, too long and too generally neglected, was receiving attention in places. Stone accounts were no longer in the confusion of a few years' ago. The co-operation of the ryots was secured to an increasing extent in the maintenance of their own marks. This was particularly good in Chittoor, Coimbatore, Chingleput and North Arcot.

Operations preliminary to maintenance

57. Pre-maintenance work was practically completed in all the taluks of the Ganjām district. In North Arcot, where there was a noticeable increase in the work done both by the ryots and the Land Records staff, it was completed in all taluks except in nineteen hill villages of the Polur taluk. In Madura two new taluks, Dindigul and Nilakkōttai, were brought under maintenance during the year. Maintenance was in progress in Palni and Periyakulam taluks and the remaining taluks were under resurvey. Good work was done in Palni.

Current maintenance

58. The balance under survey marks requiring repair or renewal was considerably reduced. The work done in this direction by the Land Records staff was particularly satisfactory in Coimbatore, Tanjore and Kistna and the outturn by the ryots was good in Chittoor, Coimbatore, North Arcot, Chingleput and Tanjore. Karnams were tentatively appointed survey officers in the districts of Nellore, Kurnool, Tinnevelly and Coimbatore and authorized to repair and renew survey marks. In other districts they were permitted to repair them and receive fees from the landholders. These measures are expected to result in a further reduction in the number of survey marks missing or requiring repair. A slight increase occurred during the year in the number of subdivisions pending checkmeasurement and a very considerable increase in the number remaining to be plotted. In almost every district the arrears of mapping were heavy, a result of the general increased supervision over, and closer scrutiny of, proposed subdivisions by Land Records Tahsildars, which will eventually lead to improvement in the quality of the maintained survey records.

Training of staff

59. Two schools for the training of Assistant and Deputy Collectors were held during the year in the Bellary and Coimbatore districts. A school for the training of Land Records Tahsildars was held in the Chingleput district. All schools were attended by the Director. The specific training of Land Records Tahsildars by officers of the department has already been in some measure justified by the results obtained. Schools for the training of revenue subordinates and karnams were also held.

WASTE LANDS

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Season and Crop Report for the agricultural year 1917–18*]

60. The total area of the Presidency is 89·702 million acres as against 89·533 million acres in the previous year, of which a net extent of 34·056 million acres was under cultivation during the year, 13·012 million acres were classed as forest and 21·966 million acres were not available for cultivation. Of the remainder 9·075 million acres were fallow as against 8·474 million acres in the previous year, and 11·593 million acres formed culturable waste other than fallow as against 11·452 million acres in 1916–17. There was a slight rise in the areas reserved for forest and not available for cultivation and a fall in the acreage under cultivation.

GOVERNMENT ESTATES

61. There is nothing to record under this head.

WARDS' ESTATES

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917)

[*Report on the administration of the Estates under the Court of Wards in the Madras Presidency for fasli 1326 (1916–17)*]

Estates under management

62. Of the nineteen estates under the Court's superintendence in the previous fasli Mirzapuram was handed over to its senior proprietor on his coming of age in October 1916. Arni and Bāgalūr were brought under the Court's management in August 1916 and March 1917, respectively. There were thus twenty estates under management at the close of the fasli.

Finance

Demand, collection and balance

63. The gross current demand of the estates amounted to Rs. 22·53 lakhs. Excluding season and other remissions the net demand was Rs. 22·11 lakhs against Rs. 23·60 lakhs in fasli 1325. Of this amount Rs. 18·99 lakhs were collected and Rs. 0·01 lakh written off leaving a balance of Rs. 3·11 lakhs at the end of the fasli. In two estates, viz., Kadambūr and Thimmajiyamma's estates, there were no outstanding balances and in three, viz., Madukkūr, Nandigām and Urkkādu, the balances exceeded 25 per cent. In the remaining fifteen estates they stood at various figures below 25 per cent. The arrear demand at the beginning of the fasli and the balance at its close showed no noticeable variations from the figures of the previous fasli. They stood, respectively, at about Rs. 11½ lakhs and Rs. 7½ lakhs. In eleven they varied between Rs. 1,000 and Rs. 15,000. In the remaining four, viz., Madugula, Madukkūr, Sāptūr and the Zamorin's estate, they exceeded the latter figure. In the last-named estate the bulk of the balance related to the period prior to its assumption by the Court and the greater part will have to be written off as irrecoverable. At the beginning of the fasli the total cash balance of all the estates excluding Mirzapuram was Rs. 5·07 lakhs. The cash receipts during the fasli and the expenditure amounted, respectively, to Rs. 31·03 lakhs and Rs. 28·36 lakhs, leaving a cash balance of Rs. 7·74 lakhs at the end of the year. Including the estimated value of grain on hand and Government promissory notes and other securities which were of the aggregate face value of Rs. 8·65 lakhs as against securities to the value of Rs. 23·36 lakhs in the previous year—the total closing balance to the credit of the estates was Rs. 17·12 lakhs against Rs. 31·30 lakhs at the end of the preceding fasli. The difference is accounted for mainly by the release of Mirzapuram from the Court's management. Kallikōta-Atagada, South Vallūru and Kangundi continued to have surplus balances of over a lakh

Surplus balances

each. Arni and Urkkādu also came under that category. The Court was considering the question of utilizing a considerable portion of the five lakhs' balance in Kallikōta for works of permanent benefit to the estate. In South Vallūru nearly Rs. 3½ lakhs of the balance which was available last year was utilized in the purchase of three villages. The balance in Kangundi was reserved mainly for improvements to the palace buildings and for the construction of a veterinary dispensary. The balance in Arni was held in reserve pending the settlement of a scheme for the liquidation of the Jaghirdar's debts amounting to over Rs. 6 lakhs. A part of the surplus in Urkkādu was invested in the war loan. Madugula, Sāptūr and Ūttumalai were the more prosperous of the remaining estates. In the first named of these a portion of the balance was invested in the war loan. In Sāptūr arrangements were made to contribute from the surplus half the cost of a new dispensary proposed to be constructed by the taluk board. In Ūttumalai a portion of the fund will be utilized in the construction of a veterinary dispensary. The average percentage for all the estates of the establishment charges and Government commission to the normal receipts rose from 15·5 to 15·7. No curtailment of these charges was possible.

Establishment charges

64. The total allotment for maramat works, including those of religious and charitable institutions attached to estates, was Rs. 5·20 lakhs, of which Rs. 3·60 lakhs, or 69·2 per cent was actually spent against 77·8 per cent in the previous fasli. Including the aggregate value of work done but not paid for, the total value of the work executed during the year was Rs. 4·23 lakhs or 81·4 per cent of the allotment against 92·5 per cent in the previous year. The total expenditure was distributed amongst irrigation works (Rs. 1·96 lakhs), buildings (Rs. 0·89 lakh), road and other works (Rs. 0·27 lakh) and establishment and contingencies (Rs. 0·48 lakh). The aggregate outlay was 16 per cent of the total ordinary charges as against 19·4 per cent in the previous year. The possibility of opening agricultural farms in Sāptūr and Ūttumalai was under consideration during the fasli.

Works

Agricultural improvements

65. At the beginning of the fasli the debts due to the estates were Rs. 1·07 lakhs. Including loans newly granted, debts newly brought to account and interest and costs which accrued during the year, the aggregate amount due was Rs. 1·29 lakhs, of which Rs. 0·39 lakh was collected and Rs. 0·05 lakh written off, leaving a balance of Rs. 0·85 lakh appertaining to thirteen estates. The outstanding debts were again large in Kallikōta-Atagada and in South Vallūru. The liabilities of the estates at the beginning of the year were Rs. 13·45 lakhs, exclusive of the two debenture loans repayable in fixed annual instalments from the income of the Kallikōta-Atagada estate. Including the debts newly contracted during the year, loans newly brought to account and interests and costs which accrued and excluding the amount repaid during the year, there was a net sum of Rs. 15·23 lakhs which was payable by eleven estates. The debts payable by Arni amounted to Rs. 7·11 lakhs. They exceeded Rs. 2 lakhs in Nandigām, and were over one lakh of rupees each in Madukkūr, Kadavūr and the Zamorin's estate. In Kadavūr, in which the provisions of section 45 of the Madras Court of Wards Act, 1902, were in operation, the balance of debts remaining to be paid off amounted to Rs. 1·91 lakhs. The sale of the "pannai" lands was the only means by which this could be discharged and orders have been issued for the conduct of the sales according to a well-considered programme. Nothing came of the proposals to issue licences for prospecting for minerals in the estate.

Debts

Debts due to the estates

Debts due by the estates

Encumbered estates

66. There were eight minors in residence at Newington—two of them not being wards of the Court. They made satisfactory progress in their studies and paid attention also to the usual out-door exercises. The Kallikōta ward was preparing for the Intermediate and the Sāptūr ward for the Matriculation examination. They visited Parlākimedi, Pithāpuram, Nuzvid and Kavalapara at the invitation of the proprietors of those estates who are all old Newington boys. Their stay in Ootacamund, which was longer than usual, did them a great deal of good. On their

Education of the wards

way back they spent a fortnight in Coimbatore, where the Principal of the Agricultural College arranged lectures for them in elementary science and also practical demonstrations in the field. They also visited the veterinary hospital, the farm and dairy, the sugar factory at Singānallūr, the coffee curing works and the spinning and weaving mills of Messrs. Stanes & Co. The minor Zamindar of Berikai, an estate noted for its sericulture, was given lessons in the breeding of silk worms. The celebration of "Newington Day" on the 3rd January 1917 was a great success.

Miscellaneous

67. The educational institutions maintained by some of the estates continued to do good work during the year except the Raja's High School, Sivaganga, in which the results of the public examinations were not satisfactory. The forests in all the estates specified in the reports for the previous fasli were worked as usual under the rules sanctioned by Government. In Madugula a large increase of forest revenue was secured by careful and systematic working, and in Kallikōta the causes which led to the decrease of forest revenue were partially removed. The survey of Nandigām was completed. In most of the estates the majority of the ryots were solvent. In those where they were heavily indebted owing to a succession of unfavourable seasons or to the high rents levied from them in the past by their zamindars the Court dealt with them in a conciliatory spirit, remitting arrears of rent or taking other measures to improve their condition. An exhaustive inquiry into the condition of the ryots in the Zamorin's estate showed that the familiar picture of the rack-rented Malabar tenant was incorrect. It is gratifying to record that the more solvent of the estates under the Court's management invested as much of the surplus balance as they could spare in the war loan.

REVENUE AND RENT-PAYING CLASSES

(FASLI 1326—1ST JULY 1916 TO 30TH JUNE 1917)

[*Report on the settlement of Land Revenue for fasli 1326*]

Revenue-paying classes

68. The principal revenue-paying classes of the Presidency are the zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The approximate area of the zamindaris in fasli 1326 was 19,085,910 acres, the total estimated revenue realized by the zamindars and the peshkash payable to Government being, respectively, Rs. 2,40,70,796 and Rs. 49,88,219. The quit-rent payable on shrotriyam villages was Rs. 7,56,840. The total extent of ryotwari holdings was 25,794,929 acres and the assessment thereon amounted to Rs. 5,19,50,893 which formed the bulk of the land revenue. The number of ryotwari villages rose by 3 to 22,324, the increase being the net result of increases in Nellore, Tanjore and Rāmnād and of decreases in Kistna and Guntūr.

Rent-paying classes

69. In ryotwari tracts subletting was chiefly resorted to by those engaged in professions other than agriculture, such as merchants, pleaders and Government servants, or by large and wealthy landholders. It was on the increase in Ganjām, in the Kāvali division of Nellore, and in a few kumeri villages of the Kasaragod taluk of South Kanara where kumeri lands were sublet for the cultivation of pepper. The Madras Estates Land Act was reported to have embittered rather than allayed disputes between landholders and their tenants in the Chandragiri division of the Chittoor district.

CHAPTER III

PROTECTION

LEGISLATING AUTHORITY

70. *Vide* pages 128 to 131 of the Report on the administration of the Madras Presidency for the year 1911-12.

COURSE OF LEGISLATION (1917-18)

Legislative Council

71. Six official Additional Members of the Legislative Council resigned during the year, two when proceeding on leave, two on their retirement from service and the rest on being nominated to the Legislative Council of the Governor-General. All these vacancies were filled in the course of the year. There was no change among non-official Additional Members. Fifteen meetings of the Council were held, including ten adjourned meetings. The average attendance of Additional Members was 38·9 (13·4 official and 25·5 non-official).

Acts and Bills

72. An Act to regulate the rate of interest and the transfer of land in the Agency tracts of the Ganjām, Vizagapatam and Gōdāvari districts was passed during the year. The object of the measure is to check the dispossession of the Khonds and other tribes in the above tracts from their more valuable lands by Uriyas and other money-lending classes and to limit the rate of interest on loans advanced to members of hill tribes. Three Bills were introduced into the Council and referred to Select Committees, viz., (i) a Bill to amend the Madras Village Courts Act, 1888, so as to provide for the establishment of village panchayat courts with power to try petty civil and criminal cases, (ii) the Madras Children Bill intended to make further provision for the custody, trial and punishment of youthful offenders and for the protection of children and young persons, and (iii) a Bill to amend and define the law applicable to intestate succession among the Mappillas governed by the Marumakkattayam or the Aliyasantana Law of Inheritance. All these Bills were pending before the Council at the close of the year. The business rules of the Legislative Council were amended so as to provide that, in future, any member desiring to move for leave to introduce a Bill into the Council should give the Secretary at least two months' notice (instead of six days' notice) of his intention and should, together with the notice, send a copy of the Bill and a full Statement of Objects and Reasons.

Government of India

73. During the year no draft Bills were sent by the Local Government to the Government of India for introduction in the Legislative Council of the Governor-General.

POLICE (1917)

[*Report on the administration of the Police of the Madras Presidency for the year 1917 ; Statistics of British India, Part VI, Administrative and Judicial—Police*]

Administrative changes

74. The retention of the Southern range was sanctioned during the year as a permanent measure and the temporary appointment of Deputy Inspector-General created for charge of that range was made a permanent

addition to the cadre. The scheme of abolition of Circle Inspectors, already under trial in the districts of Trichinopoly and Kurnool, was extended during the year to the Coimbatore district where two additional subdivisions were formed. The subdivision in the Guntūr district was reconstituted with headquarters at Narasaraopet. Transfers among District officers were fewer than in 1916. There were none in eighteen districts. At the close of the year the Superintendents of sixteen districts had the services of personal assistants. There was one death among officers during the year, viz., that of a Deputy Inspector-General who was obliged to take long leave from the 13th November owing to ill-health but died during the voyage home. No Assistant Superintendent was recruited during the year. Eleven officers of the Imperial Police Service were given commissions in the Indian Army Reserve of Officers and the total number of officers on military duty at the end of the year was fourteen. The services of two Deputy Superintendents were lent to the Military Department to assist recruiting for the Army.

The Police force

Strength

75. The sanctioned strength of the permanent force increased slightly and stood at a little less than 33,000 on the last day of the year. There was a rise of over 300 in the temporary additional forces employed which stood at nearly 2,200, the increase occurring mainly under plague police. The number of vacancies in the constabulary was slightly larger than in the previous year (1,177 against 1,127), Madras City showing the highest number. Various factors contributed to this falling off in recruitment. The present rates of constables' pay have ceased to be a living wage owing to the prevailing high prices. Recruiting for the Army and the difficulty in constructing lines or providing proper accommodation for policemen on the same scale as that which obtained in pre-war times are some of the other contributory causes. Considering these exceptional circumstances the results are far from disquieting. And there have been some encouraging features, viz., a further decrease in the number of resignations and discharges and a notable drop in desertions from the Central Recruits' School, Vizianagram. Difficulty was again generally felt in getting suitable men. Orders have been issued permitting the direct recruitment of a certain proportion of head constables. In Madras City a scheme was introduced raising the pay of constables and reducing the strength of the constabulary.

Health

There was a slight rise in the percentage of the number of admissions into hospitals on the actual strength of the force, but there was no noticeable change in the percentage of the daily average of absence on account of sickness and in the number of deaths.

Conduct

There was no appreciable change in the percentage of punishments for all offences. The decrease noticed in the previous year in the percentage of punishments for absence without leave continued. Still better results in this regard are expected from the extension of the system of granting compensation leave to the subordinate staff which is already reported to be popular. The increase in punishments for offences other than absence without leave was slight. There was a rise both in the number of dismissals (317 against 294) as well as in that of suspensions (453 against 357). The higher officers of the department have drawn the attention of Superintendents to the fact that as a form of punishment suspension should generally be avoided. There was no appreciable change in the proportion of blackmarks awarded to the actual strength of the constabulary. Resort was freely had as before to the system of deferred punishments. Judicial punishments were again fewer and there was a satisfactory decrease in the number of convictions for extortion. Five officers received the King's Police Medal and titles were conferred on an Inspector of Police and the Inspector-General's circuit clerk. The practice of granting liberal rewards to private individuals for good work and co-operation in the prevention of crime was extended during the year and energetically pursued in the Coimbatore district where there was in consequence a steady and remarkable falling off in crime. The Government have commended its adoption in other districts.

Education.

The percentage of head constables, who were classed as illiterate, remained

the same as in 1916, and there was a slight fall in the number of constables coming under that category. In the Provincial Training School, Vellore, a very large number of the subordinate officers who appeared in the final examination in October failed in "Police Orders". The Principal reports that these young men find it difficult to understand law terms and technical phraseology. The Shorthand examination in English, which was hitherto optional, was made compulsory for all sub-inspectors under training and a special allowance of Rs. 10 per mensem has been sanctioned for officers below the rank of Inspector who attain a certain degree of proficiency in it. The preliminary selection of sub-inspectors for the District Police was made by District Committees as in the previous year and the final selection by the Inspector-General. All the four central recruits' schools, including that newly opened at Anantapur, were at work during the year. In one of them (Vizianagram) a class was started for teaching English to recruits during leisure hours, the attendance being voluntary.

Village police

76. As was observed in the report for the previous year nothing could now be done in the direction of increasing or reorganizing the village police staff. But a gratifying feature of the year's administration is a growing cordiality of relationship between village officials and the police and a larger measure of co-operation from the former. The number of village officials rewarded during the year was 752 as against 591 in 1916. Some progress was made during the year in granting land to ghat talaiyaris for cultivation in the vicinity of the ghat posts.

Armed reserves

77. The armed reserves and special forces continued to be efficient and up to strength. Measures were taken for the introduction of Swedish drill in each reserve and for the formation of an ambulance section and a signalling party of 2 head constables and 10 constables. The grant to the latter of a local allowance of Re. 1 per man was also sanctioned.

Railway police

78. No serious outbreak of crime occurred on the railways, but there was a general increase in the number of thefts, especially of railway materials made of metal owing to the prevailing high prices. The amount of property lost was larger, the percentage of recovery was slightly less and detection was somewhat poorer. A system of joint checking of carriage fittings by the railway police and railway staff was introduced in the Trichinopoly Railway Police district. In the other district the seal-checking of wagons was done independently by the railway police. There were only four attempts to derail trains and the damage caused was slight. The number of cases of throwing stones at trains was 32. Two of these ended in conviction and one was committed to the sessions. The number of persons run over and killed was 213 against 198 in the previous year. The relations between the railway police and the railway staff were generally cordial.

Statistics of crime

79. The year was marked by an increase in the volume of crime which occurred mainly under "house-breaking" (+ 602) and "ordinary theft" (+ 1,248) mostly attributable to the inflation of prices owing to war conditions. The amount of property stolen was also larger. These figures are no more than natural as a depleted force cannot fairly be expected to keep pace with the uprush of petty crime consequent on abnormal conditions. What is worthy of comment is the fact that, in spite of disabilities, organized crime—ever the principal object of police vigilance—has been kept so well in hand as actually to show a decrease. The number of dacoities and robberies fell from 1,452 to 1,314 and there was a decrease of nearly Rs. 70,000 in the value of the property lost in them. Notwithstanding the high prices of hides there was a further falling off under "cattle theft". The number of murders was 728, the highest figure on record. The Dasara and Muharram festivals synchronized in the year and special arrangements to keep the peace were made in several places. A disturbance which occurred at Chennur in the Cuddapah district was, however, so grave as to necessitate the use of fire-arms by

the police. The number of true cases relating to coin remained the same as in the preceding year. A goldsmith undergoing incarceration in the Rajahmundry Central Jail contrived to manufacture anna pieces even in jail. Moulds and counterfeit coins were found concealed in his cell. He was prosecuted and convicted. The only other case deserving mention is that of treason in which a dismissed revenue inspector living in Conjeeveram, Chingleput district, attempted to communicate under a fictitious name with certain high officials in Germany through Consuls of neutral European powers at Bombay with a view to subvert British rule in India. The correspondence was seized and he was charged with offences under the Defence of India Act and the Indian Penal Code and convicted in the Sessions.

Detection and prevention of crime

80. There was a slight retrogression in detective work. Omitting cases in which investigation was refused, the ratio between the number of true cases of cognizable crime under the Indian Penal Code (excluding nuisances) disposed of in the year and the number of cases which ended in conviction was 31·1 per cent against 32·2 per cent in 1916. This result was contributed almost entirely by thefts (ordinary) in which the percentage of detection fell from 35·1 in 1916 to 32·9 in the year under report. Under the more important heads of crime detective results showed no deterioration. The percentage of murders detected was 27·8 against 22·5 and of the persons tried for murder 27·6 per cent were convicted against 21·6 per cent in the preceding year. The results are on the whole not discouraging considering the peculiar conditions under which the police had to perform their task and the additional work thrown on them outside their ordinary line such as coast patrol duties. The quality of investigation by sub-inspectors improved. The experimental scheme of abolition of Circle Inspectors was productive of gratifying results. The extension of this system coupled with that which has been sanctioned by Government of directly enlisting a certain proportion of head constables will, it is hoped, make for great improvement in the detection and prevention of crime. Investigation was refused in 7·9 per cent of the cases reported to the police against 6·6 per cent in 1916. There is further room for the exercise of this power provided it is resorted to in a judicious manner. There was a further rise in the amount of property lost and a slight fall in the percentage recovered. In some of the districts the police prosecuting staff was strengthened and as a consequence there occurred a slight rise in the percentage of success both in original cases and appeals handled by them. There was a further satisfactory decline in the number of cases struck off as "wilfully and maliciously false."

Preventive work and criminal gangs

The number of suspects newly registered in the year was slightly larger than in 1916, but the number of known depredators and receivers registered again showed a decrease. There was no appreciable change in the number of bad characters at large at the end of the year, while there was a slight fall in the percentage of these who were out of view. Relations between the British police and the French police and those of the Native States of Mysore and Hyderabad continued to be cordial. Six tribes were declared to be criminal tribes under section 3 of the Criminal Tribes Act and section 10 (*b*) of the Act (notifying residence) was applied to every registered member of these tribes. Section 10 (*a*) (reporting at fixed intervals) was applied to some of them and to most of those declared to be criminal tribes in previous years. The number of persons registered under the Act during the year was 5,303 against 3,476 in 1916 and the number of persons convicted under the Act was 1,711 against 1,323. The number on the rolls at the close of the year in the various schools attached to settlements was 1,049 (604 boys and 445 girls) against 984 (616 boys and 368 girls) in 1916. The working of the Act has had a salutary effect in several districts.

Criminal Investigation department

81. The special branch staff previously borne on the executive list was regraded into a clerical staff. There was an increase in the volume of seditious literature seized, the bulk of which was as usual from

Pondicherry. The staff of the Finger-print Bureau was temporarily strengthened by the addition of five clerks to cope with the extra work consequent on the extended operation of the Criminal Tribes Act. The number of references to the Bureau was almost the same as in the previous year, but there was a slight fall, from 24·4 to 23·7, in the percentage of successful identifications. There was little variation in the number of finger impression slips received for record, the total at the close of the year being nearly 180,000. Finger-print bureau

82. The cost of the department in the official year 1917–18 was Rs. 98·81 lakhs against Rs. 99·04 lakhs during the calendar year 1916. The former figure does not represent the entire expenditure of the year as the accounts have not been finally closed. Finance

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CRIMINAL JUSTICE (1917)

[*Statistics of the Criminal Courts in the Madras Presidency for the year 1917; Statistics of British India, Part VI, Administrative and Judicial—Criminal Justice*]

83. There were several changes in the number of courts which exercised criminal jurisdiction during the year. The number of Additional District Magistrates, Subdivisional Magistrates and Tahsildar-Magistrates each rose by one, while there was a fall of eight in Courts of Assistant and Deputy Magistrates without divisional charges, of six in Subordinate Magistrates' Courts, of four in Special Magistrates' Courts and of two in Courts of Honorary Magistrates who sat singly. Seventeen new Bench Courts were established, no less than ten of which were in the Rāmnād district, and there was a net addition of thirteen to the total number of these tribunals which exercised jurisdiction during the year and of 88 to the number of Honorary Magistrates who had seats on them. The other classes of criminal courts which exercised jurisdiction, except village magistrates' courts, remained the same as in the previous year. The four Benches of Magistrates established for the town of Madras worked throughout the year and gave substantial relief to the stipendiary magistrates, having disposed of more than 50 per cent of the cases coming before the courts. It is a matter for satisfaction that an increasing measure of assistance was being rendered to the regular magistracy by honorary officers throughout the Presidency. The qualifications demanded of presidents of first-class Benches of Magistrates were recently relaxed so as to give District Magistrates a wider latitude in their selection and it may be expected that more benches of this description will shortly come into being. The number of original cases instituted in all the criminal courts during the year fell by 24,352 to 319,000 and the number of appeals by 540 to 9,660. The number of village magistrates who exercised jurisdiction fell by 314 to 3,985, the average for the preceding five years being 4,426. In the case of one district this unsatisfactory result was attributed to a prevailing lack of confidence in this class of tribunal and to an increasing tendency on the part of the public to seek redress in the higher courts. Matters will, it is hoped, improve when the Village Courts Act Amendment Bill, which gives criminal jurisdiction to village courts constituted under Act I of 1888, becomes law. Courts

84. The number of cases instituted in Village Magistrates' Courts fell by 124 to 11,948 and the number of persons tried by those courts by 143 to 20,954. The percentage of conviction was 16·06 against 16·57 in the previous year. In the regular Magistrates' Courts 260,560 cases were instituted or 11,693 less than in the previous year, and 4,268 were pending at the end of the year against 3,715 at the end of 1916. The average duration, from the beginning to the end of a trial, of cases disposed of by these courts was 7·3 days against 6·9 days in the previous year. The average duration was 2 days before Bench Courts and Special Magistrates, 10 days before Sub-Magistrates, 29 days before Deputy Magistrates and Joint Magistrates and Original cases Village courts Regular Magistrates' courts

15 days before Assistant Magistrates. The Government have for the third time called the attention of District Magistrates to the extreme undesirability of protracted proceedings. In one district under the orders of the District Magistrate the subordinate magistracy set apart certain days of the week for the exclusive trial of police cases, the police binding over accused and witnesses to appear on the earliest appointed day. There has in consequence been a slight fall in average duration ; but the effect of the arrangement will be further watched. The number of cases instituted in the Presidency Magistrates' Courts fell by nearly 12,500 to 45,040. The increase occurred chiefly under the City Police Act and the Municipal Act and is attributable to the better observance of the traffic regulations by the public and their promptness in complying with municipal rules.

Sessions courts

To Sessions Courts in the mufassal 1,427 cases were committed against 1,473 in the previous year. The largest number of commitments were again made in Coimbatore. The pendency at the end of the year in all the courts rose from 37 to 81, to which South Arcot contributed as many as 17. The average duration before Sessions Courts again rose from 41 to 43 days. It was highest in South Arcot (72 days). Of those under trial, 45·34 per cent were discharged or acquitted against 48·71 per cent in the previous year.

The High Court

The number of cases committed to the High Court Sessions was 38 against 43 in 1916, and two cases were pending at the end of the year.

Appeals

Magistrates' courts.

85. The number of persons who appealed to first-class magistrates against the decisions of second and third-class magistrates fell by 1,510 to 13,540 and the appeals of 756 persons were pending at the end of the year as against 744 at the end of the previous year. The average duration of an appeal in courts of subdivisional magistrates was 19 days against 18 in the previous year and the percentage of successful appellants rose from 31 to 32.

Sessions courts

The number of persons who appealed to Sessions Courts against the decisions of first-class magistrates rose by 25 to 2,665, while the pendency at the end of the year fell from 225 to 160. The average duration of an appeal again fell from 27 to 23 days. It was highest in South Arcot (43 days). The percentage of successful appellants was 20·8 against 19·4 in the previous year.

The High Court

The number of appellants to the High Court rose by over 40 to 1,044. The Government appealed against the acquittal of 62 persons. Of this total number (1,106) the appeals of 466 persons were rejected in limine, the convictions of 65 were set aside, the order of acquittal of six persons concerned in the appeals preferred by Government was altered into one of conviction, the sentences on 291 were confirmed after notice, and those on 103 were reduced or otherwise altered and new trial or further enquiry was ordered in the case of 30 persons. The appeals of 145 persons, including six concerned in the Government appeals, were pending at the end of the year against 133 in 1916. The average duration of an appeal rose from 43 to 52 days.

Reference and revision

86. There were 630 applications for revision in District Magistrates' Courts against 587 in the previous year. The number of cases which these magistrates took up *suo motu* or on reports from their subdivisional magistrates fell from 38 to 29. In Sessions Courts there were 455 applications for revision, or 31 more than in the previous year ; and the number of cases taken up *suo motu* fell from 67 to 59. The High Court received 869 revision petitions, or 46 less than in the previous year ; 123 cases were reported by District Magistrates and Sessions Judges and 43 were taken up by the High Court *suo motu*. Of the 111 persons whose death sentences were referred to the High Court for confirmation under section 374 of the Criminal Procedure Code, the sentences on 65 were confirmed, those on 28 were commuted to transportation for life and 18 persons were acquitted. Sessions Judges referred the cases of 39 persons to the High Court under section 307 of the Code of Criminal Procedure as against 61 in the previous year and that court upheld the verdicts on seven persons against 32 in the previous year and reversed those on the remainder.

87. The number of persons tried by jury fell by about 230 to 1,090 and the Judge approved of their verdict in the case of 1,035 persons. Assessors tried 1,745 persons and in the case of 1,149 the Judge agreed with all of them. None of the Sessions Judges had any serious complaints to make against jurors or assessors and most of them considered that the jury system worked with fairly satisfactory results. **The jury system**

88. There was a considerable increase in the number of witnesses detained for more than three days in the courts of Sub-Magistrates and Deputy Magistrates. Among Sessions Courts, that of South Arcot was responsible for the largest number (337) of witnesses so detained. No witness was detained for more than three days in Madura and Tanjore Sessions Courts, and in several districts the number detained was under ten. The state of crime during the year presented few features of interest. With a fall in institutions there was a drop in the total number of sentences passed during the year. The amount of fines imposed (Rs. 10·18 lakhs) and of compensation (Rs. 0·46 lakh) paid to complainants under section 545, Criminal Procedure Code, remained much the same as in the previous year. The number of persons bound over to keep the peace was 1,001, and 1,545 were ordered to give security for good behaviour. Of the former 707 were not given any additional punishment and of the latter 1,129 were imprisoned for failure to give security. Notwithstanding a fall in the total number of cases for disposal there was a satisfactory increase, from 14·19 per cent to 14·84 per cent, in the number of cases rejected under section 203, Criminal Procedure Code. But there was a regrettable fall, from 2,319 to 1,984, in the number of complaints ordered to pay compensation under section 250, Criminal Procedure Code, in spite of repeated instructions enjoining a free use of that section. The Government of India have emphasized the importance of a legitimate use of this provision, and District Magistrates have been instructed to regard this as a cardinal point in their scrutiny of magisterial calendars. The number of sentences of imprisonment for 15 days and less rose during the year by 252 to 3,722. This result is disappointing in view of the strict injunctions conveyed by the Government last year against the tendency to impose short sentences. An alternative method of dealing with offences for which such sentence might be awarded is release upon probation of good conduct under section 562, Criminal Procedure Code, but the instructions issued by Government in regard to the more liberal use of this section produced no effect and the number of cases under this head actually fell from 329 to 311. There was again a considerable reduction, from 346 to 233, in the number of persons punished by confinement in stocks. There was a satisfactory fall in the number of juveniles who were committed to imprisonment, and as many as 172 were delivered to their parents or guardians as against 22 in the previous year. **Miscellaneous** **Punishments**

PRISONS (1917)

[*Report on the administration of the Jails of the Madras Presidency, 1917; Statistics of British India, Part VI, Administrative and Judicial—Jails*]

89. There was no change in the total number of central and district jails (9 and 5 respectively) which were open for the accommodation of prisoners. The number of sub-jails stood at 318, or one less than in the previous year, the sub-jail attached to a Sub-Magistrate's office in the Chingleput district having ceased to exist with the abolition of that appointment consequent on the redistribution of divisions and taluks in that district. Sufficient accommodation was available for prisoners of all classes and there was no overcrowding to any serious extent except among civil prisoners in a few jails for short periods. **Accommodation**

90. The total population of prisoners of all classes which remained in the jails and sub-jails together on the 1st January 1917, the number which remained in confinement at the close of the year, the daily average **Prisoners of all classes**

number and the number for which accommodation was available in all the jails showed no striking variations from the figures of the previous year. Each of these totals stood at a figure above 12,000 and under 12,500. As compared with 1916 there was a decrease of over 300 in the daily average number under confinement. The number of prisoners received and discharged during the year was a little over 93,500 and 93,600 respectively against an approximate figure of 92,000 under both the heads in 1916.

Under-trial prisoners

The number of under-trial prisoners in confinement at the beginning of the year was under 1,800 or slightly less than the figure of the preceding year; but the number received and discharged, which stood at a little over 40,000 under each head in 1916, rose during the year by over 2,500 and 2,000 respectively, leaving nearly 2,300 at the end of the year. The daily average number confined, which was about 2,004 in 1916, rose during the year by about 150. Of the total under-trial population dealt with, 52·67 per cent were released and 38·25 per cent were convicted. There was a regrettable increase in the average period of detention both of Sessions prisoners and those awaiting trial before Magistrates—32·66 days against 26·52 days in the case of the former and 17·51 days against 15·52 days in the case of the latter. There were 23 escapes as against 33 in the previous year and 34 deaths against 16. There is nothing worth recording in regard to the civil prisoners dealt with during the year or in respect to State prisoners.

Civil prisoners

State prisoners

Convicts

91. The strength of the convict population, which was 9,854 men and 250 women on the 1st January 1917, showed very little variation from the corresponding figures of the previous year. The number received by direct committal was 20,215 males and 929 females or 1,317 males and 175 females less than the previous year. The total number of convicts received by transfer was 25,336 as against 24,979 in 1916. Of those discharged during the year 2,664 were released on appeal, 16,109 on expiry of sentence and 2,940 under the remission rules. Twenty-five convicts were released by Government on account of sickness and 1,007 on other grounds including those released for service in Basra. One hundred and twenty-six convicts were deported to Port Blair, 18 were sent to the Lunatic Asylum, one of the convicts who escaped remained at large at the close of the year, 60 were executed and 147 died. The daily average number fell from 9,962 to 9,488 and 9,425 remained in confinement on the last day of the year. As usual, the great bulk of the admissions were Hindus (all except about 12 per cent). Muhammadans formed a little over 9 per cent and Christians a little less than 3 per cent. There was again a satisfactory drop—from 94 to 64—in the number of convicts admitted under sixteen years of age.

Juveniles

There was a fall also in the number of juvenile offenders under fifteen years of age admitted (29 against 39) and the number of girls fell from 15 to 3. Seven boys were transferred to the Reformatory School, Chingleput. The jail for adolescents at Tanjore continued to work satisfactorily. The usual course of instruction in general education, physical and moral training and teaching of industries was followed. Besides technical instruction given in carpentry, weaving, sandal-making, tailoring and various other industries, practical instruction in agriculture was imparted by a graduate from the Agricultural College, Coimbatore, employed for the purpose.

Conduct

92. The number of escapes fell from 21 to 7 (3 from central and district jails and 4 from sub-jails). Six of the latter were recaptured besides six others who had escaped in previous years. There was a fall of over 100 in the number of offences dealt with by superintendents and a similar drop in the grand total of punishments awarded, the actual numbers being, respectively, 8,413 and 8,501. Whipping was awarded in only 9 cases as against 19 in the previous year. The conduct of the prisoners was generally satisfactory and there was no disturbance or combination against authority in any jail. The total number of habituals dealt with was 7,302 forming 27·14 per cent of the convict population. They received no less than 4,530 or 53·85 per cent of the total number of punishments. Eight of

Habituals

the nine whippings were awarded to them and one of them received that punishment twice. During the year 2,940 convicts were released under the remission rules as against 3,070 in the preceding year. Special remission for continuous good conduct for one year was awarded to 1,884 convicts. Extra remission was earned by 338 convicts for work done in addition to the prescribed task, while 22 convicts earned Rs. 101-6-10 in the shape of money grants for extra task performed by them. The jail schools were fairly full. Education was confined to reading, writing and arithmetic imparted in the vernaculars. English was taught to a few convicts in the Coimbatore Central Jail for press work. Almost all the schools were inspected by officers of the Educational department whose opinion on the progress made was favourable. Lectures were given to convicts on moral and religious subjects. The jail libraries were added to during the year and continued to serve a useful purpose.

Remission

Education

93. There was an increase of nearly 850 in the number of admissions to hospital which stood at 5,334. The number of deaths rose from 150 to 188 and the death-rate from 12·06 to 15·49 per mille. In the Trichinopoly Central Jail an overhead cistern capable of holding 4,000 gallons of water was constructed, the municipal water being pumped into it and distributed by means of pipes and hydrants. A new fly-proof kitchen was under construction in that jail ; another was completed and brought into use in the Salem Central Jail. An oil-engine was installed over the drinking-water well in the Cuddalore District Jail, and improvements in the pumping arrangements of the drinking-water were effected in the Tanjore Jail. The civil debtors' kitchen in the latter jail was rendered fly-proof. The hospital kitchen at Vellore was improved and fitted with fly-proof wire netting. Masonry latrines in that hospital were replaced by cage latrines. Latrines were made fly-proof in Rajahmundry and Trichinopoly.

Vital statistics

Sanitation

94. Excluding the outlay by the Public Works Department on jail buildings, the total expenditure of the year amounted to Rs. 16·17 lakhs or Rs. 0·70 lakh more than that of the previous year. This increase was chiefly due to a larger outlay on manufactures and to increased expenditure under establishment and extraordinary charges. The total cost and the cost per head under dieting and clothing and bedding of prisoners declined. The cash earnings of the year amounted to Rs. 2·12 lakhs and was the highest on record. As a result of larger cash earnings, the net cost of maintaining prisoners fell from Rs. 8·58 lakhs to Rs. 7·85 lakhs and the net cost per head of average strength also declined from Rs. 65-3-0 to Rs. 59-7-0. The total expenditure on jail and sub-jail buildings amounted to Rs. 1·26 lakhs, of which Rs. 0·92 lakh was spent by the Public Works Department and the remainder by the Jail Department.

Finance

CIVIL JUSTICE (1917)

[*Statistics of the Civil Courts in the Madras Presidency for the year 1917 ; Statistics of British India, Part VI, Administrative and Judicial—Civil Justice*]

95. There was no change in the total number of permanent courts which dispensed civil justice during the year. Two temporary Subordinate Judges' Courts were established at Tanjore and Vellore, while those at Salem and Cuddapah were abolished. The number of these courts thus continued to be 20. The Additional Sessions Judge at Bellary was appointed Subordinate Judge and worked almost throughout the year. The two special small cause courts continued to work. The temporary Additional District Munsif's Court at Vellore was abolished, thus reducing the total number of these courts to 28. The Government propose to make

Courts

11 of the temporary sub-courts and 14 of the temporary munsifs' courts permanent. One of the two I.C.S. officers who were undergoing judicial training completed his training in June, while the other continued to work in Vizagapatam till the end of the year. In addition to the regular courts, 5,712 village courts exercised civil jurisdiction as against 5,817 in the previous year.

Litigation

Number, nature and value of suits

96. The total number of suits instituted in the Presidency fell by nearly 27,000 to 516,734. The figure is still considerably in excess of the institutions for 1914 (488,979), although there are clear indications that the rush in litigation which followed the war in consequence of the anxiety of creditors to recover outstanding debts has to some extent spent itself. One suit was instituted for every 80 persons of the population as against one for every 76 in the previous year. Judged by this standard North Malabar was the most litigious district in the mufassal and Bellary continued to be the least litigious. The largest number of suits was instituted in Tanjore, and Kurnool again contributed the smallest number. Suits instituted for money or movable property formed 89·03 per cent of the total institutions as against 89·25 per cent in the previous year. Suits for immovable property, including mortgage suits, fell from 50,375 to 48,120 and suits for specific relief from 4,856 to 4,760. The total value of suits instituted in courts other than village and revenue courts and unpaid tribunals was Rs. 985 lakhs, or Rs. 49 lakhs more than in the previous year. Apart from revenue courts, 37 per cent of the suits instituted were of the value of Rs. 20 and less and 58 per cent between the values of Rs. 20 and Rs. 500. The number of suits above Rs. 500 in value was 22,870, the highest figure on record. The number of suits triable by village courts which were filed before the higher tribunals fell by 5,000 to 55,345. There is no reason to suppose that there was any purely speculative litigation during the year as, out of every 100 suits instituted, plaintiffs were successful either wholly or in part in no fewer than 77 and were found to possess a well-grounded cause of action in 72 per cent of contested cases. The total number of appeals preferred in 1917 rose by about 600 to 17,000.

Courts of original jurisdiction

Village courts

97. The total number of suits instituted in village courts decreased by about 10,000 to 126,600. South Arcot, Tanjore and Madura contributed largely to this falling off. The decrease in South Arcot was the heaviest and was due to the failure of the groundnut trade and to scarcity of money. On the other hand large increases occurred in North Malabar, Kistna and South Malabar owing, in the case of the first-named district, to the establishment of Additional Bench Courts and in that of the last to the growth of petty litigation generally. The number of suits disposed of by village munsifs sitting singly fell by over 10 per cent, but there was a marked rise in the number disposed of by benches. The total number

Revenue courts

of suits filed in revenue courts other than in Agency tracts rose by about 3,300 to 23,600. Rāmnād contributed the largest number of suits (4,360) as in previous years ; Madura and Trichinopoly came next. There was no marked change in the average duration of contested suits but that of uncontested suits rose from 66 to 94 days. The percentage of appeals preferred from the decisions of revenue courts to the appealable decrees passed by them fell from 10·24 to 8·11. The percentage of appeals in which original decrees were confirmed was 34·83 against 48·3 in the previous year. There was no noticeable variation in the volume of litigation which came before Agency courts, but there was a satisfactory fall, from 131 to 93 days, in the average duration of contested suits. The number of ordinary suits filed in District Munsifs' Courts, other than those for the Agency tracts, was 108,700 or 1,200 less than in the previous year. The number of small cause suits filed fell by 15,400 to 203,400. There was thus a decrease of 16,600 in the total of both classes of suits. But the arrears at the end of the year especially of ordinary suits practically remained untouched ; and the average total disposal of each court further fell from 2,111 to 2,025. The average duration of contested

Agency courts

District Munsif's courts

ordinary suits decreased from 323 to 312 days. In Subordinate Judges' Courts, other than those for the Agency tracts, the number of ordinary suits instituted fell by about 240 to 2,160 and the number of small cause suits by about 1,400 to 19,800. But the arrears remained at much the same figures as in the previous year as the disposals of both classes of suits also decreased—ordinary suits from 2,800 to 2,600 and small causes from 23,000 to 20,000. The average duration of contested ordinary suits fell from 559 days to 512 but still exceeded 250 days in all except two courts. The files of ordinary suits and disposals in District Courts showed no marked variations from the figures of the previous year. The work of these courts was generally satisfactory, but the average duration of contested suits which they had to deal with rose from 463 to 477 days. In the Special Small Cause Courts the institutions fell by nearly 1,000 to 13,200; but there was a corresponding decrease in disposals also and the pendency rose from 1,340 to 1,420 suits. The average duration of contested suits increased from 65 to 93 days. A similar state of things obtained in the Presidency Court of Small Causes, viz., a fall in institutions and disposals followed by a rise in pendency; but there was a slight improvement in the average duration both of contested and uncontested suits. In the Madras City Civil Court 549 suits were instituted and 525 were disposed of as against 501 and 504 in 1916. The number of contested suits disposed of was 338, almost the same number as in the previous year, but the average duration of these suits fell from 234 to 215 days. The number of suits (520) instituted in the High Court or received by transfer was only slightly in excess of the figure for the previous year, but the disposals fell from 598 to 475 and this is ascribed to the fact that only one court sat for a longer period than in former years. The arrears increased from 287 to 329. There was, however, a satisfactory fall from 438 to 331 days in the average duration of contested suits.

Subordinate Judges' courts

District courts

Courts of small causes

Madras City Civil Court

The High Court

98. The number of appeals filed in the Agency tracts was 121 or double that of the previous year, of which 102 were disposed of. There was a slight rise in the average duration, but the percentage of confirmation further improved from 55 to 61. The number of appeals filed in District and Subordinate Judges' Courts was 13,300 as in the previous year. The arrears in the latter rose from 2,300 to 2,700, but in the former they fell from 7,100 to 6,500. The average duration of contested and uncontested appeals fell in both classes of courts, the fall in the case of District Courts being marked. The number of appeals filed in the High Court from original decrees of mufassal courts was 430 as in the previous year. The number disposed of was 530 as against 550 in the previous year and the arrears decreased by 100. The average duration of appeals disposed of fell from 548 to 466 days. One hundred and ninety-three Letters Patent appeals (other than original side appeals) were filed against 289 in the previous year; but the disposals fell from 504 to 232. The arrears were reduced from 118 to 79. The number of appeals received against appellate decrees was 2,500 against 2,000 in 1916. The number disposed of was 2,500 against 3,100 in 1916 and the arrears slightly rose from 2,300 to 2,350. The number of revision petitions filed in the High Court fell by 100 to 1,320, of which 800, the same number as in the previous year, were for the revision of the decisions in small cause suits. The number disposed of was 1,380 against 1,650 in the previous year and the arrears decreased slightly to 1,000. There were no noticeable variations in the receipts and disposals of cases referred to the High Court by the lower courts.

Appellate courts

District and Subordinate Judges' courts

The High Court

Reference and revision

99. The steady increase noticed in the past in the number of insolvency petitions presented to mufassal courts was maintained during the year. The institutions rose by 350 to 2,700 and the disposals by 600 to 4,540. The number of persons adjudged insolvent was 1,660 or 260 more than in the previous year. Creditors' claims to the extent of Rs. 19·52 lakhs were admitted against Rs. 11·03 lakhs in the previous year and assets amounting to Rs. 4·28 lakhs were distributed against

Insolvency

Mufassal courts

Rs. 4·51 lakhs in 1916. In the High Court 251 petitions were presented against 274 in 1916, and 266 were disposed of against 278 in the previous year. The total amount of claims admitted was Rs. 11·27 lakhs and the dividends paid to creditors Rs. 3·05 lakhs.

Miscellaneous

Execution

100. The total number of applications for execution received in all the courts in the mufassal taken together, except village courts, was 356,000 against 357,000 in the previous year. Satisfaction in full was obtained in 16·3 per cent of the applications disposed of and satisfaction in part in 7·8 per cent, and the number of wholly infructuous applications rose from 266,000 to 270,000. There was a regrettable increase, from 2,300 to 3,500, in the number of debtors imprisoned in execution. One hundred and thirty-one District Munsifs inspected the records of over 2,700 village courts, and 117 District Munsifs' and Subordinate Judges' Courts were inspected during the year as against 95 in the previous year.

Finance

101. The total receipts of civil and criminal courts amounted to Rs. 109·70 lakhs and the charges to Rs. 88·67 lakhs.

REGISTRATION (1917) AND COMPANIES (1917–18)

[*G.Os. No. 1129, Home (Judicial), dated the 13th May 1918, and No. 1452, Home (Judicial), dated the 19th June 1918; the Statistics of British India, Part II, Commercial, and Part VI, Administrative and Judicial—Registration—Indian Companies Act*]

Registration

Offices

102. The revenue districts of Vizagapatam and Nellore, which had been amalgamated for registration purposes since January 1913 with Gōdāvari and Guntūr, respectively, were reconstituted as separate registration districts with effect from the 1st June 1917 and the 1st October 1917; the registration district of Madura, comprising the two revenue districts of Madura and Rāmnād, was divided into two separate districts, both with headquarters at Madura. The number of district charges in the Presidency thus rose to 21. No new sub-districts were formed, the number of sub-offices standing at 490 and that of sub-registrars at 513.

Registrations

Registrations fell from 1,377,135 to 1,359,634 or by 1·27 per cent, the chief contributory causes being the slackness in trade and mercantile activities and the unsettled condition of the money market in consequence of the war. As compared with the pre-war year 1913 the decrease was only ·7 per cent. The decline occurred in all the important classes of documents except sales of the value of Rs. 100 and upwards, where it was negligible, and gifts, where an increase occurred owing to a change in classification. The average value and the average fee per document increased from Rs. 331 to Rs. 340 and from Rs. 1–7–10 to Rs. 1–8–1 respectively. The number of documents registered by or on behalf of co-operative societies increased from 12,016 to 13,630 and the fees leviable but foregone amounted to Rs. 36,116 against Rs. 30,675.

Prosecutions

Eight cases under the Act were pending at the opening of the year and 16 were newly instituted. Twelve of these ended in conviction and four in acquittal, leaving eight pending.

Finance

The total income rose from Rs. 24·66 lakhs to Rs. 24·75 lakhs and the expenditure from Rs. 13·58 lakhs to Rs. 14·17 lakhs.

Registered companies

103. There were 374 working companies at the beginning of the year, 332 limited by shares and 42 by guarantee. Forty-nine were registered, one public company which was removed from the register in the previous year under section 247 of the Act was restored by the High Court, 26 companies, all public, ceased to work, 2 public companies were converted into private companies and 2 private companies into public companies. There were at the close of the year 398 companies, 355 limited by shares, one an unlimited private company and 42 limited by guarantee. There

were 52 mills and presses, of which 22 were European and 30 Indian, the 9 rice mills falling under this class being all Indian. Among planting companies, 16 were European and 3 Indian. The 3 mining concerns were mixed—European and Indian. Of the 2 breweries, one was European and the other Indian. The only sugar manufacturing concern was European. The number of registrations (49) was the highest on record since the introduction on the 1st April 1914 of the Indian Companies Act, 1913, and was double the average for the three years 1914—17. The 18 trading companies registered were the outcome of the swadesi movement and of Indian enterprise. Licences under section 26 of the Act were granted to four associations—the Manamadura Vidya Abivardhani Sangam, the Edward VII Tuberculosis Institute, Madras, the Cocanada Chamber of Commerce and the Madras Medical Association. Of the 26 companies which ceased to exist 11 were banking and lending firms, 5 were insurance companies and 6 were trading concerns. The new companies registered include 22 banking and lending companies, 18 trading houses and 3 planting companies. The increase in registrations from 17 to 49 as against the decline from 29 to 26 in the number of companies which ceased to exist establishes the fact that there is no practical difficulty on the part of companies in complying with the requirements of the Act. The aggregate increases in the authorized, subscribed and paid-up capital amounted to Rs. 37·21 lakhs, Rs. 49·08 lakhs and Rs. 44·19 lakhs, respectively. Of the last increase mills and presses absorbed about Rs. 17 lakhs, banking and lending companies (mostly nidhis) about Rs. 15 lakhs and trading companies about Rs. 10 lakhs. The number of certificated auditors at the close of the year was 57, viz., 3 permanent unrestricted, 10 permanent restricted and 44 temporary restricted. The receipts rose from Rs. 9,817 to Rs. 12,625 and the expenditure from Rs. 11,825 to Rs. 12,045. Five provident insurance societies ceased to work during the year and there were no new registrations. The number of working societies was thus reduced from 18 to 12. All the societies which ceased to work during the year were dividing societies, the constitution and working of which were described in the report for the previous year. There now remain only 2 out of the 16 societies of this class which were in existence four years ago. Revised rules under the Provident Insurance Societies Act came into force in May 1917.

Provident Insurance Societies Act, 1912

104. There were 141 notarial stations and 182 registering officers exercising the functions of Notaries Public as against 140 and 178, respectively, in 1916–17, the increase being the result of the reconstitution during the year of three registration districts, the Registrars of which were appointed Notaries Public. The operations were confined to seventeen stations. Bills of Exchange increased from 26 in 1916–17 to 51 in 1917–18. Seven bills of exchange dealt with in Coimbatore were foreign bills of the Bank of Madras dishonoured in four cases for the reason that the goods to which they related were not up to sample and in two on account of the non-receipt of goods which were lost at sea. The increase in the other stations was consequent on the inability of merchants to meet bills in time on account of the restrictions in transport facilities, both foreign and inland, and the stringency of the money market. The rise in the aggregate value of transactions from Rs. 0·74 lakh to Rs. 2·18 lakhs was disproportionate to that in the number of operations. This was due to the fact that seven promissory notes of the aggregate value of Rs. 1·50 lakhs drawn against a single individual were noted for non-payment in Tuticorin. The fees realized amounted to Rs. 284–1–6 against Rs. 255–6–0 in 1916–17 and a sum of Rs. 59–7–0 was expended by Notaries Public. The balance of Rs. 224–10–6 was remitted into the treasury during the year.

Notaries Public (1917-18)

CO-OPERATIVE SOCIETIES

(1ST JULY 1917 TO 30TH JUNE 1918)

[*Annual Report on the working of the Co-operative Societies Act for the year 1917–18 ; Statistics of British India, Part II, Commercial*]

General

105. The outstanding features of the year's working were the activities shown by agricultural societies and unions in doing a good deal of joint purchase and sale, the starting of new societies for the benefit of weavers, fishermen and the Badagas of the Nilgiris, attempts towards the introduction of co-operation into the Agency tracts of the north and the expansion and development of supervision by local unions. There were 56 administrative unions at the beginning of the year and 18 local unions were newly registered, thus bringing the total number of purely administrative unions to 74. The total number of societies under the control of unions (local, supervising or banking) for purposes of supervision was 2,415 as against 1,758 in the previous year. The result was seen in a general improvement in collections over that of the previous year. The number of societies which were registered was 515 as against 421 in the previous year, and the registration of thirteen was cancelled. Excluding unions and liquidated societies there were 2,644 societies at the close of the year as against 2,216 at its beginning. The number of individual members rose from 163,121 to 191,041, giving an average of 72 members to a society against 74 in the previous year. The number of Panchamas admitted into agricultural societies increased by 1,455 to 7,078. The total working capital of all societies rose from Rs. 204·99 lakhs to Rs. 234·92 lakhs, their paid-up share capital from Rs. 20·49 lakhs to Rs. 26·13 lakhs and their reserve funds from Rs. 9·66 lakhs to Rs. 11·88 lakhs. The total deposits attracted from outside the movement amounted to Rs. 66·04 lakhs as against Rs. 60·23 lakhs in the previous year. In spite of war conditions the loans by central societies to primary societies increased from Rs. 71 lakhs to Rs. 79·81 lakhs. The net profits for the year amounted to Rs. 3·34 lakhs as against Rs. 1·99 lakhs in the previous year, the marked increase being due to the inclusion of accrued interest on loans in the profit account of primary societies. The total cost of working the Act to Government was equivalent to ·810 of the total working capital as against ·807 in the previous year. The total cost of societies on account of supervision was Rs. 0·47 lakh as against Rs. 0·26 lakh in the previous year.

Working of societies

Provincial and District banks

106. No great headway was made towards the conversion of the Provincial Bank into a genuine federation, but in other respects the bank showed satisfactory progress. Its operations were as usual almost entirely confined to financing central banks and to lending direct to societies in districts where there are no central banks. There was no large increase in share capital but there was a substantial increase in deposits and working capital, and the reserve fund was also increasing satisfactorily. The net profits were not so high as in the previous year. Five central banks were registered during the year and a sixth was formed at Cuddalore by the conversion of the South Arcot district supervising union into a financing institution. There were thus nineteen central banks at the end of the year : and negotiations were in progress for the formation of new banks in seven districts in five of which there are no central financing institutions. The new central banks registered during the year made a fairly good start, the share capital and deposits secured by them being respectively Rs. 0·58 lakh and Rs. 0·91 lakh. They all followed, with minor modifications, the banking union model in which both individuals and societies participate and in which provision is made for supervision both by the central bank and by local unions. The Salem Central Bank definitely adopted the banking union constitution, having admitted as many as 101 societies as members and having elected two society delegates to their

Board of Directors. The Christian Central Bank did a good deal of business with old and new Panchama societies. In some cases their dealings were on the ordinary terms; and in some cases they lent more than one-eighth of the estimated assets of the members of the society, which is the standard of maximum borrowing power generally followed by financing institutions. The share capital of all the financing banks in the Presidency rose from Rs. 6·30 lakhs to Rs. 8·31 lakhs and their reserve funds from Rs. 1·51 lakhs to Rs. 2·02 lakhs. Their owned capital, therefore, amounted to Rs. 10·32 lakhs, which represents nearly 16 per cent of the total amount of the loans and deposits from outside the movement. In spite of the conditions arising out of the war the uncollected balance, under instalments of current principal and interest, showed a marked improvement over the previous year. There was a considerable rise in the percentage of balance to demand in arrear interest, but the sum involved under this head was comparatively insignificant. The profits made by financing banks were, generally speaking, normal. The number of agricultural credit societies was 2,271 on the 30th June 1918 as against 1,907 in the previous year, of which eight were on a limited liability basis and 2,263 with unlimited liability. The working capital of these societies rose from Rs. 88·03 lakhs to Rs. 97·93 lakhs. Their paid-up share capital was Rs. 7·22 lakhs against Rs. 5·87 lakhs in the previous year, and the increase amounted to over 40 per cent in no less than fourteen districts. The improvement is really greater than these figures show, since the figures of previous years were vitiated by the inclusion of the share capital of liquidated societies. There was also an encouraging increase from Rs. 8·52 lakhs to Rs. 8·99 lakhs in the local deposits secured by agricultural credit societies. As a result of the orders issued by Government during the year permitting the inclusion by primary societies of accrued but not overdue interest on profits, 1,257 societies worked at a profit of Rs. 2·01 lakhs. The other societies were unable to wipe off the losses accrued during the previous years. Deducting this loss there was a net profit of Rs. 0·47 lakh under the head of agricultural credit societies. The improvement in collection by these societies was maintained during the year, but there were still heavy arrears. Loans amounting to Rs. 78·29 lakhs were due by members at the end of the previous year as against Rs. 64·87 lakhs at the end of 1916-17 and the amount overdue fell from 17·95 per cent to 14·93 per cent. The percentage of the previous year's unpaid interest overdue at the end of the year continued to be 50·48. Agricultural societies granted loans to the extent of Rs. 49·69 lakhs as against Rs. 45·38 lakhs in the previous year. The increase occurs mostly under loans for productive purposes, which amounted to Rs. 29·77 lakhs as against Rs. 25·99 lakhs in the previous year. It is a matter for regret that long-term loans were too readily given, especially in the Tamil country. This is apt to be demoralizing to the borrower and it tends to restrict the credit both of the society and of the members and thus to prevent the regular financing of ordinary agricultural operations. The number of non-credit societies rose from 14 to 19, of which 17 were purchase societies and two were for production and sale. The articles purchased were chiefly agricultural implements, seed and manure and also the ordinary necessaries of life. Similar activities were attempted by 24 ordinary credit societies and four local unions. Non-agricultural credit societies numbered 283 at the end of the year as against 196 at the beginning. The number of limited liability societies increased from 140 to 206 and that of unlimited liability societies from 56 to 77. Their total working capital increased from Rs. 25·62 lakhs to Rs. 31·35 lakhs and the profits from Rs. 0·83 lakh to Rs. 1·19 lakhs. There was a slight falling off in collection, but the figures for this class of societies are better than for agricultural societies. The actual percentages of balance to demand under principal, overdue interest and current interest were 9·24, 34·39 and 10·60 against 9·00, 35·76 and 8·15 in the previous year. The share capital held by these societies rose from Rs. 7·22 lakhs to Rs. 9·08 lakhs and their deposits amounted

Agricultural societies.

Non-agricultural societies.

to Rs. 17·72 lakhs as against Rs. 15 lakhs in the previous year. Their borrowings from central and other societies rose from Rs. 2·26 lakhs to Rs. 3·11 lakhs. There is no doubt that these societies conferred great benefit on the urban population. There were 39 societies for purchase, purchase and sale and production as against 17 in the previous year and 18 new urban stores were opened. The total sales to members amounted to over Rs. 8 lakhs and the profits to Rs. 33,000, out of which over Rs. 5 lakhs and over Rs. 23,000 were contributed by the Triplicane Stores alone. A number of societies for the exclusive benefit of particular classes, such as cotton and silk weavers, cobblers and fishermen, several building societies and a co-operative printing society were at work during the year. A secondary school at Mangalore made the interesting experiment of forming itself into an unregistered society on co-operative lines for the benefit of its students. There were at the end of the year 43 societies exclusively composed of Panchamas as against 15 in the previous year.

Miscellaneous

107. There was a further recognition of the principle of supervision by local unions and the number of local unions rose from 56 to 74 with 1,725 societies affiliated to them as against 1,283 societies in the previous year. There remained only 209 primary societies which were not enjoying union supervision of some sort or other. Owing to the introduction of the arbitration rules there was a considerable decrease in the extent to which societies resorted to civil courts. The number of Assistant Registrars' charges was increased from seven to eight and 14 additional Inspectors were sanctioned. The annual provincial conference was held in Madras in December 1917 under the presidency of the Hon'ble Mr. P. Rajagopala Achariyar, Member of Council, and a large number of important subjects was discussed and some interesting resolutions passed. There were district conferences at Ponnur in the Guntūr district and at Cuddalore at which the Collectors presided, and a large number of union conferences were held all over the Presidency. A great measure of assistance was received from the other departments of Government, particularly the Agricultural and Industrial departments. The attitude of the general public to the co-operative movement was, as before, most cordial and benevolent, and ready and enthusiastic co-operation was forthcoming from numerous public-spirited gentlemen of all classes.

LOCAL BOARD ADMINISTRATION (1917–18)

[*Statistics of British India, Part VIII, Local Funds—Local Boards*]

General

Constitution and strength of boards

District boards

Taluk boards

108. There were 25 district boards as in the previous year and their constitution remained unchanged. At the end of the year 769 members, or ten more than in the previous year, took part in the deliberations of the district boards in the Presidency. Of these, 125 were ex-officio, 278 nominated by Government, and the remaining 366 elected by taluk boards, the corresponding figures for the previous year being respectively 124, 283 and 352. Two hundred and ninety-two meetings were held by district boards as against 286 in 1916–17. There were 96 taluk boards, as in the previous year, and their constitution remained unchanged. The number of boards which elected their own presidents was raised from three to four and 33 others, or five more than in the previous year, had non-official presidents. The sanctioned strength (1,764) of the taluk boards remained unchanged, but the actual number of members at the end of the year rose, by 21, to 1,669, of whom 370 were officials and 1,299 non-officials, as against 383 and 1,265 respectively in the previous year. Of the 269 seats open to election in the year, 234 were actually so filled, and in the case of elections actually contested 51·6 per cent of the registered voters came to the poll as against 33·6 per cent in 1916–17. The number of seats which had to be filled up by presidents of district boards by nomination because

no candidates were proposed rose from 17 to 31. One thousand two hundred and forty-two meetings, or six less than in the previous year, were held by taluk boards. The number of union panchayats which assisted in the administration of local affairs in important villages rose, by 53, to 464 and there was no change in their constitution or functions. The number of panchayatdars rose, by 413, to 4,331, of whom 943 were village headmen, 3,327 were nominated and 61 elected. Union panchayats

109. The land-cess was levied at As. 2 on every rupee of the land receipts assessment in the Nilgiris, at rates varying from As. 2 to As. 1-3 in Malabar, at As. 1-6 in South Kanara and at 1 anna in the remaining districts. In addition to that cess a special cess of 3 pies in the rupee on the annual rent value of all occupied lands was levied in sixteen districts for the construction of railways. Tolls upon carriages, carts and animals were collected in all districts except in Guntūr. House-tax was levied in all unions except nineteen which were constituted late in the year ; the maximum rates were in force in 374 cases, three-fourths in 62, and half rates in the remaining nine. Excluding the transactions under debt heads, the year opened with a balance of Rs. 185·85 lakhs or Rs. 9·15 lakhs more than in the previous year. The receipts rose by Rs. 21·96 lakhs to Rs. 201·70 lakhs ; excluding the receipts from the special railway cess the revenue from rates and taxes rose, by Rs. 3·55 lakhs, to Rs. 104·48 lakhs. Increases occurred under land-cess, house-tax and tolls. There was a rise under land-cess in thirteen districts, and a fall in twelve districts. The income from tolls showed an improvement in seventeen districts, noticeable increases occurring in Madura, Coimbatore and Tanjore. The grants received from Provincial funds amounted to Rs. 56·94 lakhs, of which Rs. 17·13 lakhs were contributed in aid of the general resources of local boards, Rs. 9·78 lakhs were granted for roads and bridges, Rs. 0·68 lakh for hospitals and dispensaries, Rs. 1·17 lakhs for medical buildings, Rs. 2·98 lakhs for minor sanitary works and Rs. 0·32 lakh for choultries. The grants for public works were paid as usual to the District Boards of the Nilgiris (Rs. 1·08 lakhs) and Koraput (Rs. 0·27 lakh) in consideration of the smallness of their revenues. The contributions to the general resources of local boards included lump assignments intended to enable them to equip and maintain their own elementary schools adequately. The grants towards hospitals and dispensaries were intended to meet the Provincial share of the pay and allowances of medical subordinates employed by local boards and half the cost of the maintenance and equipment of hospitals and dispensaries opened after 1915 ; the grants for choultries consisted mainly of lump payments made in lieu of the income from lands originally endowed therefor by their founders but subsequently resumed by Government. **Finance Receipts**

110. Excluding the charges relating to debt heads and the contribution from one district board to another and an expenditure of Rs. 2·77 lakhs, which, though debited to service heads, was met from loans that were credited to debt heads, and adding repayments of loans amounting to Rs. 10·94 lakhs, the total expenditure of the local boards rose, by Rs. 7·15 lakhs, to Rs. 178·63 lakhs and the year closed with a balance of Rs. 208·91 lakhs. The outlay on public works rose, by Rs. 2·29 lakhs, to Rs. 79·49 lakhs ; Rs. 23·65 lakhs were spent on the construction of roads, bridges, school houses, dispensaries, markets and other miscellaneous public improvements and the remainder on repairs to existing works. The length of the new roads constructed was 146 miles or 21 miles more than in the previous year ; the expenditure on this account rose by over Rs. 13,000 to Rs. 2·72 lakhs. A length of 13,833 miles of roads was repaired as against 24,796 miles in the previous year, and the outlay thereon fell from Rs. 44·13 lakhs to Rs. 37·35 lakhs. At the close of the year local boards maintained 40 sessional schools for the training of teachers, one Sanskrit College, 75 secondary schools and 6,884 elementary schools. In the sessional schools 1,121 students received **Expenditure** Public works Education

instruction and the attendance at all schools rose, by 3,631 boys and 8,662 girls, to 330,545 boys and 82,549 girls. The total expenditure of local boards on education was Rs. 31·22 lakhs as against Rs. 29·89 lakhs in the previous year, towards which fees contributed Rs. 4·36 lakhs and Provincial funds Rs. 16·39 lakhs. The net local fund outlay was thus Rs. 10·47 lakhs or 12·3 per cent of the total ordinary income of the local boards as against 13·3 per cent in the previous year. The number of hospitals (122) maintained by the local boards remained the same as in the previous year, while the number of dispensaries rose, by one, to 280. The cost of maintenance increased, by Rs. 0·29 lakh, to Rs. 9·57 lakhs, but the number of patients treated at them fell by 73,190 to 4,472,212. The number of vaccinators including probationers employed by district boards was 708 or eight less than in the previous year. The average cost of each successful operation fell from As. 3–11 to As. 2–8. The expenditure on sanitation decreased by Rs. 1·62 lakhs to Rs. 10·95 lakhs ; special attention was paid to rural water-supply as in the previous year.

Medical institutions

Vaccination

Sanitation

Railways

111. The District Boards of Coimbatore, Tanjore, Guntūr, Kistna and Salem possess open railways. The balance in Government securities in favour of the railway fund of the Tanjore District Board at the beginning of the year was the same as in the previous year, viz., Rs. 28·56 lakhs ; there was, besides, a balance of Rs. 0·90 lakh in cash as against Rs. 0·73 lakh in the previous year. The gross traffic earnings decreased, by Rs. 0·78 lakh, to Rs. 9·41 lakhs, and the working expenses also fell, by Rs. 1·15 lakhs, to Rs. 4·68 lakhs. The district board repaid Rs. 0·71 lakh to Provincial funds towards the recoupment of the Government share in the railway, which is treated as a loan, paid Rs. 0·23 lakh to debenture holders as interest and Rs. 0·56 lakh to the sinking fund towards the liquidation of the debenture loan. The profit derived from the working of the railway was Rs. 4·73 lakhs or 8·7 per cent of the capital outlay as against 8·04 per cent in the previous year, and at the end of the year the balance in favour of the fund after taking into account all charges and receipts was Rs. 28·56 lakhs in Government securities and Rs. 15,425 in cash. In Kistna the opening balance of the railway cess fund was Rs. 19·70 lakhs in Government securities and Rs. 2·76 lakhs in cash ; the gross earnings of the railway declined, by nearly Rs. 11,000, to Rs. 3·72 lakhs and the working expenses also fell, by over Rs. 5,500, to Rs. 1·68 lakhs. The district board repaid a sum of Rs. 1·35 lakhs to Provincial funds towards the Government loan taken for the construction of the line. The profit on the working of the railway was Rs. 2·04 lakhs or 9·1 per cent of the capital outlay as against 9·4 per cent in the previous year, and the closing balance in favour of the fund was Rs. 21·50 lakhs in Government securities and Rs. 1·82 lakhs in cash. The opening balance of the railway cess fund in Coimbatore was Rs. 7·08 lakhs in Government securities with a cash deficit of Rs. 0·40 lakh. The gross earnings of the railway were Rs. 1·80 lakhs and the working expenses Rs. 0·86 lakh. The district board paid Rs. 0·48 lakh towards the capital and interest on the loan borrowed from the public and from the Bank of Madras. The profit on the working of the railway was Rs. 0·94 lakh or 8·3 per cent of the capital outlay as against 7·8 per cent in the previous year, and at the end of the year the balance in favour of the fund was a little over Rs. 6 lakhs in Government securities and a cash deficit of Rs. 5,541. The net earnings of the railway in Guntūr amounted to Rs. 0·54 lakh or 3·7 per cent on the capital outlay as in the previous year. The net earnings of the railway in Salem which commenced working during the year amounted to Rs. 3,730 or 0·75 per cent on the capital outlay.

MUNICIPAL ADMINISTRATION—MUFASSAL (1917-18)

[*Statistics of British India, Part VIII, Local Funds—Municipalities*]

General

Constitution and strength of councils

112. The unions of Tiruppūr and Udamalpet were constituted municipalities in the year. Two new councils were opened and the maximum strength of all the councils (72) increased from 1,162 to 1,183 members, the actual strength at the end of the year being 1,090 as against 1,089 in the previous year, of whom 89 were ex-officio, 448 nominated by Government and the remaining 553 elected by the rate-payers. The system of appointing councillors by election was in force in 62 municipalities. The proportion of Indian to European and Eurasian members increased slightly and, as in the previous year, 21 councils consisted entirely of Indian members. The councils held 1,856 meetings, or 18 less than in the previous year, and 89 others were adjourned for want of a quorum. The average attendance of councillors at each meeting fell from 59·2 per cent of the total strength to 57·5 per cent.

Finance

Receipts

113. The opening balance was Rs. 33·98 lakhs against Rs. 39·42 lakhs in 1916–17 and the current receipts increased, by Rs. 4·45 lakhs, to Rs. 91·76 lakhs, the increase occurring mainly under "rates and taxes" and "grants and contributions", compensated partly by a reduction under "extraordinary and debt". The income from the tax on buildings and lands rose from Rs. 16·81 lakhs to Rs. 17·62 lakhs, that from the water and drainage tax from Rs. 8·36 lakhs to Rs. 8·78 lakhs, the tax on arts and professions from Rs. 2·94 lakhs to Rs. 3·04 lakhs, the receipts from tolls from Rs. 7·59 lakhs to Rs. 8·30 lakhs and those from educational institutions from Rs. 2·87 lakhs to Rs. 3·20 lakhs. The average incidence of taxation per head of the population again rose from Rs. 1–12–2 to Rs. 1–15–4. It was as usual relatively high, and higher than in the previous year, in the hill municipalities where it ranged from Rs. 5–13–2 to Rs. 9–15–7 ; in the plains it ranged from Rs. 3–14–9 to As. 14–0. There was an increase of Rs. 1·29 lakhs in the grants and contributions paid by Government which amounted to Rs. 15·08 lakhs. These were devoted to general purposes (Rs. 7·44 lakhs), education (Rs. 5·62 lakhs) and medical purposes (Rs. 2·02 lakhs).

Loans

Loans amounting to Rs. 2·29 lakhs were advanced to municipal councils by Government as against Rs. 2·16 lakhs in the previous year. These consisted of a loan of Rs. 0·67 lakh to the Madura Municipal Council for the extension of the water-supply scheme, of sums aggregating Rs. 0·64 lakh lent to six municipal councils for expenditure on survey, of Rs. 0·35 lakh borrowed by the Ellore Municipal Council for the construction of a building for the Municipal office, of a loan of Rs. 0·34 lakh given to the Vellore Municipal Council for drainage works and of several smaller sums borrowed by other municipal councils for various purposes. Besides the sum borrowed from the Government, the Madura Municipal Council raised a loan of Rs. 0·21 lakh in the open market for special drainage and water-supply schemes.

Expenditure

114. The expenditure fell, by about Rs. 1·05 lakhs, to Rs. 91·70 lakhs. The expenditure on public works fell, by Rs. 11·91 lakhs, to Rs. 29·02 lakhs or about 31 per cent of the total charges, of which Rs. 7·62 lakhs were spent on communications.

Public works

Water-works in nine municipal towns, improvements and extensions to existing water-works in six municipalities and drainage schemes for two towns were under execution by the Public Works Department. Water-supply schemes for twelve municipalities, improvements to existing works in five municipalities, drainage schemes for twelve municipal towns, and improvements to the drainage works in two towns were either under investigation or preparation by the Sanitary Engineer or under the consideration of the Sanitary Board or the Government.

Medical

In Tiruppūr and Udamalpet, which were newly constituted municipalities, the local boards continued to maintain the hospitals. The hospitals in Bellary were taken over by the Government with effect from the 1st December 1917. The arrangements for medical relief to the public in the other municipalities continued to

be the same as in the previous year. The number of in-patients treated rose, by 4,841, to 50,195 and that of out-patients, by 47,991, to 2,551,708. The cost of maintenance increased, by Rs. 1·32 lakhs, to Rs. 7·86 lakhs.

Education

There were 654 educational institutions maintained by municipal councils, or 92 more than in the previous year. The increase occurred entirely under elementary schools. On the other hand the number of elementary schools, which the councils aided with teaching grants, fell by 37 to 329. The net educational charges amounted to 6·6 per cent of

Sanitation

the income from general taxation. The expenditure on conservancy was Rs. 11·94 lakhs and that on lighting Rs. 3·51 lakhs as against Rs. 11·49 lakhs and Rs. 3·13 lakhs, respectively, in the previous year. The closing balance of the year was Rs. 34·03 lakhs.

Debt

115. The public debt outstanding against municipalities fell from Rs. 30·63 lakhs to Rs. 30·28 lakhs. It was about one-third of the annual revenues and there were sinking funds towards its repayment to the extent of Rs. 1·16 lakhs or about 3·8 per cent.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS (1917-18)

[*Statistics of British India, Part VIII, Local Funds—Municipalities*]

Finance

116. Including the opening balance the total receipts of the Corporation amounted to Rs. 49·25 lakhs as against Rs. 55·74 lakhs in the previous year and the expenditure was Rs. 39·32 lakhs against Rs. 46·34 lakhs. The income from municipal rates and taxes was Rs. 23·57 lakhs or Rs. 1·13 lakhs more than in the previous year. This increase was chiefly due to cursory as well as general revisions of assessment. The incidence of taxation per head of the population was Rs. 4-8-9 against Rs. 4-5-3 in 1916-17. The revenue derived from municipal property and powers apart from taxation was Rs. 6·07 lakhs or Rs. 41,094 more than in the previous year. This increase was chiefly due to the sale of lands and buildings not required for the Corporation and to the realization of interest on investments of the surplus funds during the year. The grants and contributions from Government amounted to Rs. 2·90 lakhs as against Rs. 1·38 lakhs in 1916-17 and were made up of the usual annual contribution of Rs. 40,126 and a special grant of Rs. 2·50 lakhs for improvement of water-supply and drainage and for sanitary works. The miscellaneous receipts rose from Rs. 2·09 lakhs to Rs. 2·26 lakhs. A loan of four lakhs of rupees was received from Government for the improvement of water-supply and drainage. Government promissory notes pledged with the Bank of Madras were sold during the year and the loan due to the Bank was discharged and the excess of Rs. 27,468 was credited to general revenues. The debt at the close of the year was Rs. 99·98 lakhs. A sum of Rs. 40,415 was paid towards Government instalment loans and Rs. 4·02 lakhs towards interest on all loans. The sinking funds at the end of the year on account of the several loans, excluding the Government instalment loans, amounted to Rs. 25·29 lakhs in Government promissory notes and stock certificates and Madras municipal debentures and Rs. 1,740 in cash.

Works

117. The expenditure on works amounted in all to Rs. 18·48 lakhs or 46·9 per cent of the total expenditure as against Rs. 26·67 lakhs in the previous year. Of this sum Rs. 6·54 lakhs or 16·6 per cent were spent on new works, Rs. 10·18 lakhs or 25·9 per cent on repairs, Rs. 1·44 lakhs or 3·6 per cent on establishment and Rs. 32,193 or 0·8 per cent on tools and

Communications

plant. A sum of Rs. 8,488 was spent on new works such as acquisition of lands and buildings for widening roads and rounding off corners, and the construction of a foot-path. The amount spent on repairs was Rs. 3·50 lakhs against Rs. 3·10 lakhs in 1916-17. During the year, 45·21 miles of road were re-formed against 43·46 miles in the previous year. Two

miles, 3 furlongs and 192 yards of unmetalled roads were metalled and 2 furlongs and 77⅓ yards of roads were tarred for the first time. In addition, 1 mile, 4 furlongs and 100 yards of roads were re-tarred and an experimental length of asphaltic road surface was laid in Georgetown. An experimental concrete road surface was laid over a bridge and works of reconstruction and improvement were in progress on certain other bridges. The expenditure on new works was Rs. 77,583 and that on repairs Rs. 35,452. Certain additions and improvements were carried out in Raja Sir Ramaswami Mudaliyar's Lying-in Hospital and the Royapetta Hospital. Land was acquired for a model school in Oobrapalaiyam and the construction of another model school in Edapalaiyam was in progress. The drainage arrangements to the model milch cow house in Basin Bridge Road were completed and improvements to the mangers of the cattle sheds were made. A flush-out latrine was completed and the construction of two others was in progress. Land was acquired for a latrine and for a rubbish dumping depot. A pail depot was completed and another was under construction. A new dhobikhana was being erected and extensions were being carried out to the existing dhobikhana. **Buildings**

The amount spent on drainage works was Rs. 5·67 lakhs and on maintenance Rs. 4·48 lakhs. The construction of a gravitation main which will convey all the sewage from the southern and western areas of the city was continued up to the end of October 1917, when, owing to the rise in the level of the subsoil water, it was decided to stop the work. The laying of cast iron pipes in a section of the Purasawakam gravitation main was completed. Similar work was commenced in Perambur but had to be stopped owing chiefly to the difficulty in obtaining cast iron pipes. The construction of the foundations for the Napier Park Pumping Station was completed and stoneware pipes were laid in the Purasawakam area. The DeCaster Road scheme and a portion of the main channel in connexion with the anti-malarial drainage work were completed. In 450 houses house drains were connected with the syphons and in 513 houses, connexions were made from the syphons to the municipal sewer and sewers were laid and the storm water and side drains were constructed in various parts of the city. **Drainage**

The expenditure on water-supply works was Rs. 87,282 and that on maintenance was Rs. 1·82 lakhs. A length of 96,360 feet of water pipes was laid under the new scheme making a total of 434,800 feet. The restricted programme was completed with an appreciable saving, due partly to the reduction in the cost of pipe laying and partly to the high prices obtained for unserviceable pipes. In consequence, the laying of the most urgently required pipes that were omitted from the restricted programme was started. The quantity of water supplied during the year was 5,038·08 million gallons, which was equivalent to 27 gallons per head per day. The maximum average daily consumption per head in any month was 30 gallons and the minimum 26 gallons. During the year, the waste detection staff examined 21,000 houses and brought to notice over 3,000 defects in the services. Under ordinary works 622 new services were laid by the licensed plumbers and 3,652 were repaired, cleaned, altered or extended. The total number of house service connexions in the city on the 31st March 1918 was 29,326. During the year 7,469 feet of old pipes were cleaned and relaid, 4,994 feet of new mains were laid and 8 valves, 31 stopcocks, 1 hydrant and 118 meters were fixed. The quantity of water supplied to the city as measured at Red Hills was 803,180,745 cubic feet as against 848,983,248 cubic feet in the previous year. **Water-supply**

118. The expenditure on education was Rs. 40,983 against Rs. 39,416 in the previous year, the increase being due to the maintenance of the five new schools opened at the close of the year 1916–17. The total number of schools maintained by the Corporation was 21, the same as at the end of the previous year, and there were 2,822 boys and 480 girls on the rolls of these schools on 31st March 1918. There were 126 teachers in the Corporation schools and most of them were qualified. Permission was granted to philanthropic associations and societies to conduct **Education**

free night-schools for the poor in 19 of the Corporation school buildings and a few of the teachers of the Corporation schools were also granted permission to be on the staff of those schools. Twelve teachers were under training in the Government Training School, Triplicane, and stipends were paid to these.

Sanitation and medical services

119. The cost of maintenance of the Corporation hospitals and dispensaries amounted to Rs. 78,425 against Rs. 86,652 in 1916–17. The total number of patients treated in them was 175,277 as against 172,359 in the previous year. The usual contribution of Rs. 20,000 to Government on account of hospitals and contributions to other medical institutions amounting to Rs. 14,994 were paid.

Vaccination

The amount spent on vaccination was Rs. 15,143 against Rs. 15,250 in 1916–17 and the total number of cases vaccinated in the city in the calendar year 1917 was 38,061. The percentages of success in primary vaccination and re-vaccination cases were 98·27 and 54·49 respectively, as against 96·87 and 65·52 in 1916–17. The number of children under one year vaccinated was 20,732.

Births and deaths

The expenditure on registration of births and deaths was Rs. 20,577 as against Rs. 18,704 in 1916–17. The number of births and deaths registered in 1917 was 23,296 and 19,917 as against 21,675 and 17,872 respectively in 1916. The birth and death rates were respectively 44·9 and 38·4 per mille as against 41·8 and 34·5 per mille in 1916.

Plague

There were one indigenous and seven imported cases of plague of which six proved fatal. The number of rats caught and destroyed was 158,863, making a total of 2,255,419 since the beginning of the operations in July 1898.

A sum of Rs. 5·25 lakhs or 13·36 per cent of the total expenditure was spent on sanitation and conservancy during the year as against Rs. 4·54 lakhs in 1916–17.

Anti-malarial operations

The activities of the Corporation executive in combating malaria were chiefly directed towards minimising the mosquito nuisance and the subsequent danger to public health. Nine hundred and twenty-seven tanks and ponds were cleaned and re-cleaned ; 4,542 pits and cess-pools, 501 tanks, 897 ponds, 19 low marshes and 30 wells were petrolized every week in addition to numerous other small pools and puddles that were formed soon after the rains in several low-lying tracts and tank-beds ; 2,270 wells were examined to ascertain whether fish that has been introduced were living in them and in 614 or 27·04 per cent the wells were found fishless. Malaria accounted for 4·3 per cent of the total deaths as against the same rate in 1916, which gives a death-rate of 1·7 per mille.

Miscellaneous

120. A sum of Rs. 2·40 lakhs was spent on lighting, and the cost of maintenance alone amounted to Rs. 80,409. Two hundred and seventy-five new electric lights were installed and one was removed. The number of electric lights on 31st March 1918 was 2,412. There were also 4,189 oil lamps and one power lamp. The public parks were maintained at a cost of Rs. 41,846 as against Rs. 38,653 in the previous year. The cost of the maintenance of fire-engines was Rs. 21,158 against Rs. 14,925 in 1916–17. These engines were requisitioned for ten fires as against twelve in 1916–17.

MILITARY (VOLUNTEERING) (1917–18)

121. The inauguration of the Indian Defence Force put a stop to volunteering as such and the new conditions were fully operative during the year. The thirteen volunteer corps which were attached to the 9th (Secunderabad) Division were reorganized into ten Units of the Defence Force with a total strength of 7,302 men. The Yercaud Rifles and the South Indian Railway Rifles were formed into a single Battalion—the 29th South Indian Railway Battalion. The Nilgiri Rifles and Malabar Rifles were similarly amalgamated, as were also the Bangalore Rifles and Coorg and Mysore Rifles, their new designations being, respectively, the

20th Nilgiri-Malabar Battalion and the 6th Bangalore-Coorg and Mysore Battalion. Considerable bodies of these Units consisting of officers, non-commissioned officers and men were mobilized for guard and other duties. In the 1st Madras Guards an average of 310 non-commissioned officers and men with six officers were continuously mobilized for duty at Fort St. George. In the 2nd (Madras) Group of Garrison Artillery 141 of all ranks were on service; a Captain was awarded the Order of the White Eagle 5th class (with Swords), and a Sergeant the meritorious service medal for distinguished service in the field. The 20th Nilgiri-Malabar Battalion also sent several officers and men for active service, some of whom joined the Indian Army Reserve of Officers and the army at home. For the third year in succession the regimental team of the 43rd Kolar Gold Fields Battalion won the shield presented by His Excellency the Governor for ambulance work.

MARINE (1917-18)

[*Reports of the Madras Port Trust and the Madras Port Department for 1917-18; Statistics of British India, Part VIII—Local Funds*]

Madras Port Trust

122. The receipts of the Port Trust on Revenue account from all sources were Rs. 16·07 lakhs against Rs. 13·13 lakhs in 1916-17, an increase of about 22·35 per cent. But a sum of Rs. 2·92 lakhs of this increase was consequent on the imposition on imports and exports of 25 per cent super-dues till the 22nd August 1917 and of 50 per cent from that date to the end of the year. Omitting contributions made by Revenue to Capital, which amounted to Rs. 5·67 lakhs, gross working expenses were Rs. 12·25 lakhs or 76·21 per cent of gross receipts. Excluding interest on loans (Rs. 5·32 lakhs) the actual working expenses came to about 43 per cent of harbour earnings against 53·35 per cent in 1916-17. The average cost per ton of goods passed through the port by the Trust's own agency was Rs. 3·16. If the whole of the goods passing through be counted, the average cost was Rs. 2·25 per ton. The harbour dues alone, excluding charges for specific services such as cranage and storage, came to Rs. 10·12 lakhs. The average charges paid by shipping came to about As. 2·45 per registered ton. The cost given above, of facilities offered to shipping and to goods, have increased comparatively rapidly in the last four years especially since the super-dues were imposed. Prior to the war the rise in cost had been comparatively slight, but some rise was to be expected as the result of the improvement of the various facilities offered to shipping and to goods.

Works

123. The west quay of the Madras Harbour was practically completed during the year. Each of the four berths was supplied with fresh water and telephone connexions. Much useful work was done at the two northern berths of the quay, especially in respect to the export of munitions. The reconstruction of the wrecked breakwater head could not be carried out on the intended design because of the impossibility, during war time, of getting certain steel required for the building of a caisson which it was intended to float to site, drop on the bottom and sink to a depth of 30 feet into the sea-bed, precisely like a bridge foundation-well. The design therefore had to be changed, and a semi-permanent head was contrived to be built up of horizontal 20 to 30-ton concrete blocks, held together by some 70 to 80 tons of 5-inch and 6-inch diameter steel bars got out of certain dismantled screw piers. This semi-permanent head will stand on a wide-spreading apron, or bed, of rubble stone not standing as the wrecked one did above sea-bed but laid 10 feet deep in a hole to be dredged below sea-bed. The newly designed or repaired breakwater bends away on a 400 feet curve to the westward of north, thus avoiding, and leaving to seawards of itself, the fallen 5,000-ton monolith and a great part of the wreck of the former structure. These wrecks are expected greatly to aid in the stability of the semi-permanent head and to hold it safe until war conditions permit

of the resumption and completion of the original caisson-well design, the site of which has been located so far in advance of that of the semi-permanent head that the sinking of the caisson will, it is expected, not be interfered with by the rubble stone underlying the latter. During the year 255 slice and wavebreaker blocks were removed from the wrecked work, the total removed from the beginning being 461 blocks of 185,000 cubic feet. A length of 109 feet was restored comprising 18 slices equivalent to 147,000 cubic feet. The total number of blocks manufactured from the beginning of operations, viz., February 1917 to end of March 1918 was 1,158.

Trade

124. The total tonnage which passed through the port during the year amounted to 631,000 tons, of which imports showed a decrease of 23,000 tons and exports an increase of 55,000 tons as compared with the previous year. The exports of the year, amounting to 225,120 tons, were the largest on record for the past fourteen years. The chief items of export contributing to this increase were (1) ores of which some 22,000 tons, or nearly 6,000 tons in excess of the previous year, were exported ; (2) groundnuts of which 100,000 tons left the port ; (3) 10,000 tons of oil-cake to Java; (4) vegetable oil, a comparatively new item of export, of which 7,000 tons went to London, Rangoon and Singapore ; and (5) 13,000 tons of castor seed to London for the Air Craft Board. The decrease in imports was mainly due to the conditions of shipping owing to the war, the chief items affected being piece-goods, railway materials, hardware, machinery, paper, provisions, soap, yarn and Government stores. There were increases under some of the other heads, namely, 30,000 tons of sugar, more than double the figure for the previous year, were imported from Java ; some 49,000 tons of rice and 5,000 tons of raw hides came from Burma ; and 108,000 tons of mineral oil—the highest on record for the past 14 years—of which 90,000 tons, or nearly 20 per cent more than in 1916-17, were kerosene oil and 18,000 tons fuel oil, which is well above the 14,000-ton average of the four previous years. The value of the private trade in foreign merchandise from foreign ports amounted to Rs. 982·47 lakhs against Rs. 1,047·16 lakhs in the previous year. Imports from Japan increased by over 80 per cent, being valued at Rs. 48 lakhs against Rs. 26 lakhs in the previous year, the chief items of increase being matches, brass and copper wire and rods and hardware. There was a fall of 20 per cent in imports from America. In Indian merchandise from Indian ports the trade rose to Rs. 203·13 lakhs from Rs. 169·96 lakhs, showing an increase of about 19·5 per cent. There was a considerable decrease in the value of trade of Indian merchandise to foreign ports, which was only Rs. 384·63 lakhs against Rs. 954·87 lakhs. The value of Indian merchandise to Indian ports was Rs. 154·35 lakhs against Rs. 95·03 lakhs, showing an increase of Rs. 59·32 lakhs.

Minor Ports

Finance

125. The trade of the ports during 1917-18 received a severer set-back than in any of the other war years owing chiefly to the further depletion of steam tonnage and the various import and export restrictions. The receipts of Port, Marine and Coast Light Funds amounted to Rs. 5·93 lakhs and the expenditure to Rs. 8·12 lakhs. The closing balance consisted of Rs. 4·21 lakhs in cash and Rs. 13·60 lakhs in Government securities. The port dues collections amounted to Rs. 1·24 lakhs against Rs. 1·75 lakhs and the coast light dues to Rs. 0·71 lakh against Rs. 0·78 lakh in the preceding year. The aggregate value of the sea-borne trade on private account at the outports was Rs. 24·79 crores against Rs. 27·48 crores in the previous year. Its volume declined to a much larger extent than what is indicated in these figures as the values for most of the commodities were higher than in preceding years. Tuticorin continued to maintain its place at the head of the outports in spite of a marked expansion in the volume of trade at Dhanushkodi. The trade of Mangalore showed a noticeable improvement. The number and tonnage of vessels that entered the outports during the year were, respectively, 19,769 and 2,097,074 tons as against 17,295 and 2,826,686 tons in 1916-17. A larger number of country

craft was engaged in the coastal trade which accounts for the decrease in tonnage in spite of an increase in the number of vessels. The total number of passengers that arrived at and sailed from the various ports was 349,031 against 504,127 in the previous year. As usual the largest traffic was carried on at Dhanushkodi. A sum of Rs. 2·49 lakhs was spent on public works. The expert sent out by the Secretary of State to report on the improvements of the Cochin harbour visited the port during the year and concluded his investigations. The work of diversion of the Upper Odai, which was believed to be the cause of the silting up of the Tuticorin harbour, was put in hand during the year.

General

126. As a result of the prevailing high rates of freight and the scarcity of tonnage there was a remarkable development in the output of fresh wooden tonnage for coasting trade and no less than six vessels of about 300 tons each and a large number of smaller craft were laid down during the year. Cocanada, Talarevu, Coringa, Masulipatam, Calicut and Mangalore were all busy with the construction of new vessels. Dredging operations for the maintenance of boat channels were carried on by four dredgers at the ports of Cocanada, Cuddalore and Negapatam and nearly 103,000 tons of silt were removed. There were 19 shipping casualties during the year as against 20 in 1917, and two fire accidents, one of which was attended with considerable loss of life. The cause of the fire could not be traced in either of the cases. Coast lights were exhibited at all the outports throughout the year without interruption and the Madras Light which had been extinguished for military reasons towards the close of the previous year was relit in February 1918. All the port lights were also exhibited throughout the year with the exception of the Hare Island light (Tuticorin) which was relit only at the beginning of March. The working of the port rules and regulations was satisfactory and the boat supply at the several ports was up to requirements.

MORTALITY FROM WILD ANIMALS AND SNAKES (1917)

[*Report on the measures adopted for the destruction of wild animals and snakes during the year 1917; Statistics of British India, Part V, Area, Population and Public Health*]

Mortality

127. The number of persons killed by wild animals and snakes was 531 and 1,464, respectively, against 452 and 1,505, the totals for the previous year. The mortality from wild animals was as usual highest in Ganjām and Vizagapatam and was as in previous years caused mostly by tigers some of which in the first-named district were man-eaters. More than 100 deaths from snake-bite occurred in each of the districts of South Arcot, Trichinopoly, Tanjore and Malabar. Vizagapatam and North Arcot also returned high numbers.

Wild animals

Snakes

Rewards

128. A total sum of Rs. 17,269 was disbursed as rewards for the destruction of wild animals and a sum of Rs. 12,963 was spent in clearing rank undergrowth from the neighbourhood of villages.

MISCELLANEOUS (1917)

[*Reports on the working of the Indian Arms and Explosives Acts, and of the Poisons Act, 1904; Return of sulphur licences in force during the year 1917*]

Arms, explosives and sulphur

129. There was an increase of over a thousand in the number of licences for arms which stood at 47,990. Licences to carry arms for sport, protection and display numbered 34,264, or an increase of 171 notwithstanding the fact that in one district (Malabar) there was a fall of over 500. The districts which contributed largely to this increase were

Coimbatore, Salem, Madura, Trichinopoly and South Kanara. The total number of licences for the destruction of wild animals doing injury to crops or cattle was 12,367 as against 11,423 in 1916, the increase occurring principally in Malabar where the number rose by nearly 800. There has been a steady increase in recent years in the number of licences issued for breech-loading guns which rose during 1917 by nearly 900. There was again a regrettable increase (+ 70) in the number of revolver licences and this occurred in the districts of Coimbatore, Trichinopoly, Madura and Rāmnād. The total number of licences under the Explosives Act again fell from 10,583 to 9,683 and this was due to the decrease in blasting operations. The continued fall in the number of prosecutions under the Arms and Explosives Acts was again kept up. There were only 456 against 695 in 1916, and the percentage of conviction was lower. There was a slight increase in the number of sulphur licences granted and the quantity for which licences were obtained rose by over 60 tons.

Poisons Act

130. The number of licences under the Indian Poisons Act, 1904, rose from 151 to 186. The increase was mainly contributed by Madras City where the number rose from 4 to 50. The number exceeded 10 in Malabar, Gōdāvari, Kistna and Tinnevelly. There were fourteen prosecutions under the Act against only one in the previous year. Twelve of these ended in conviction. No less than nine of the prosecutions were instituted in the Gōdāvari district. There were none in Madras City.

CHAPTER IV

PRODUCTION AND DISTRIBUTION

AGRICULTURE (1917–18)

[*Reports on the working of the Agricultural and Civil Veterinary Departments, Madras Presidency, for the year 1917–18 (G.Os. No. 3248, Revenue, dated the 14th September 1918, and No. 3054, Revenue, dated the 26th August 1918); Agricultural Statistics of British India*]

General

131. The superior staff of the department, which is inadequate even in normal times, was depleted during the year by the deputation of a Deputy Director to Mesopotamia. One additional Assistant Director was appointed for charge of the seventh circle and a second Assistant Agricultural Engineer was also sanctioned temporarily for one year in the first instance to investigate the possibilities of the expansion of the cultivable area under well irrigation. The Government Economic Botanist was permitted to visit Burma to study the work on rice improvement which is being carried on there. The Government Sugarcane Expert deputed his assistant to visit the various farms in the United Provinces and Bihar and the Central Provinces to study the sugarcane growing there and to conduct certain measurements of selected varieties of cane. The Dyeing Expert was deputed to investigate the condition of Madras indigo manufacture. The Government Entomologist and his establishment, originally sanctioned only for five years, were placed on a permanent footing from the 24th April 1917. The Director of Statistics visited the Presidency in November 1917 and discussed with the Director of Agriculture the possibility of improving the published forecasts and statistics of crop production with special reference to cotton. The Indian Cotton Committee visited all the important cotton tracts of the Presidency in February and March 1918 and the agricultural stations at Hagari, Nandyal, Kovilpatti and Coimbatore and the Director of Agriculture toured with the members in the Guntūr, Kistna, Madura, Tinnevelly and Coimbatore districts. At Coimbatore the President of the Committee inspected the sugarcane station and the general work of the central farm in his capacity as Agricultural Adviser to the Government of India. The four coconut stations in the South Kanara district, the sheep and the seed farm in the Alur taluk of the Bellary district and the potato seed farm at Nanjanad in the Ootacamund taluk of the Nilgiri district commenced regular work during the year. A sub-station near the Palur Agricultural farm for testing varieties of groundnut and a demonstration farm near Gudiyāttam in the North Arcot district were sanctioned. The sugarcane breeding station at Coimbatore was extended and a site for an agricultural station for Cambodia cotton was selected near Pollachi in that district. The year witnessed the passing out of the Agricultural College of the first batch of diplomates under the revised curriculum inaugurated in June 1914, all the eight students who appeared for examination coming out successful. In the agricultural or first two years' course, 32 students passed, the percentage of passes being 94 against 72 in the previous year. Forty-two candidates were selected for admission into the college out of 205 applicants. Nine resigned subsequently so that the number that remained at the end of the year was 33. Besides

the decrease in the number of applicants there was deterioration in the quality of the students selected. It is a matter for regret that in a province in which 70 per cent of the population depend on agriculture for their subsistence, the desire for improved and scientific knowledge of the subject is so poor.

Agricultural research and experiments

132. The season at most of the agricultural stations was not very favourable. The rainfall was up to or above the average, but was badly distributed, the breaks in the monsoons coming at abnormal times, and there being no break between the two monsoons. The only serious result however so far as the work of the department was concerned was the failure of certain experiments on cotton at Hagari and on paddy at Manganallur. The distribution of varieties of sugarcane suited to the several tracts was continued. New varieties were tried at Anakāpalle, Samalkot and Palur and some of them gave very good yields. At the last-mentioned station "Fiji B" yielded at the rate of nearly 44 tons of cane per acre. Seed-farms for the multiplication of varieties of cane were organized and improvements in cultivation, in crushing and in the manufacture of jaggery continued to be popularized. Owing to the high price of iron pans and mills the ryots had some difficulty in getting their canes crushed. But the department assisted them by arranging loans of the necessary plant. The spacing experiment with paddy which had been in progress at Coimbatore since 1910 was brought to a close during the year. Single seedlings gave the best results in certain varieties and thicker planting in certain others. The value of the several methods depends also on the relative value of grain and straw. But the experiments as a whole entirely justified the advice given by the department to ryots to plant their paddy very much more economically than they are accustomed to do. The practice of reducing the seed-rate of paddy continued to spread in all districts. To cope with the increased demand for seed of improved strains a system of seed-farms was started during the year. The experiment at Samalkot to test the value of hot weather cultivation on the succeeding paddy crop was brought to a conclusion, the results of four years being uniformly in favour of the practice. An experiment has been in progress since 1914–15 to test the correctness of the contention of the ryots that they must get their crop transplanted before the end of July if they were to obtain full crops. The results showed conclusively that late planting leads to poorer yields and that close spacing or heavy manuring cannot counteract this. The use of green manure crops and of bonemeal, fish guano and fish manure continued to spread and to be encouraged. The important experiments on paddy manuring at Manganallur were continued, but the unfavourable physical condition of the soils was a limiting factor which prevented any large difference being shown. It was, however, clear from these experiments that it is possible to increase the yields of paddy in the Tanjore delta very considerably by the application of suitable manures containing phosphorus and nitrogen. The department was therefore starting a large scale demonstration experiment in that delta giving out a manure mixture, based on experience gained at Manganallur, for trial by ryots on a large number of plots. Drill cultivation in the Tinnevelly tract was growing more popular among the ryots. Owing to the efforts made by the department in close co-operation with cotton firms and Revenue officials, Pulichai cotton may be said to be practically extinct in the Tinnevelly tract. As a result of thirteen years' work of the department the country cotton in Tinnevelly has been replaced to a large extent by superior strains of selected cotton under which there were at least 250,000 acres during the year benefiting the ryots to an extent of Rs. 50 lakhs. In Tinnevelly much progress was made in the organization of seed unions for the multiplication of seed of improved strains of Tinnevelly cotton. The selection, testing and multiplication of single plant selections of cotton were continued on the agricultural stations at Nandyal, Hagari and Kovilpatti. Experiments on introducing groundnuts, Cambodia cotton and fibre crops into the local rotation on dry, garden and wet

Sugarcane

Paddy

Cotton

Dry grains

lands, respectively, were in progress at Anakāpalle. The experiments at Nandyal as to whether a main leguminous crop cannot profitably be introduced into the local rotation were continued. Rotation experiments with castor, field beans and cholam were in progress at Coimbatore. Experiments on wide spacing of cholam were continued at Coimbatore and Nandyal. The comparison between fodder cholam and guinea grass was continued at Coimbatore. Lucerne did not do so well as in the previous year and Rhodes grass which did well before on small plots was a failure when tried on a large scale. Fodder maize again did well. A variety of lucerne (*alfalfa*) obtained from Baghdad through the Commandant of the Madras Gardeners' Corps was tried at Hagari and Coimbatore and showed considerable promise. A new sub-station for carrying out the tests of varieties of groundnut was selected and leased during the year. Endeavours were made to obtain fresh seed of groundnut from the principal foreign countries growing it, but a quantity was received only from Spain. The single plant selections were being continued and showed some promise. The year under report marked the beginning of scientific work on the coconut at the new stations on the West Coast. The germination of several varieties of nuts was studied and various indigenous methods of germinating were compared. At one of the stations a detailed study of the plant was made with a view to laying out definite experiments in future. The pepper crop, which is peculiarly sensitive to the season, was adversely affected at Taliparamba by the absence of rain in May and the long break in the monsoon. The experiments on potatoes at Hagari were repeated but the crop was again destroyed by heavy rain. A trial was made with various vegetables at Kovilpatti. Henbane did not do well. At the request of the Board of Revenue Indian hemp (*Cannabis sativa*) was grown at Coimbatore for seed. Marked variation was noticed in the crop and there can be no doubt that selection for vigour and yield of ganja would be profitable. By the purchase of a number of half-bred dairy cattle the value of the Coimbatore dairy herd was brought up by nearly 50 per cent. But a large number of cattle succumbed at the end of the year to rinderpest which appeared in a severe form in spite of the prompt application of the recognized remedy of inoculation. The dairy work continued to expand. Preliminaries were put in hand for the location of a cattle farm in the Ongole tract in Chintalapudi village, Kavali taluk, Nellore district. Attention was paid to improving the present breed of buffalo, a valuable dairy animal, which supplies most of the ghee and butter consumed in the Madras Presidency. The sheep from Hagari and Nandyal were transferred during the year to the new farm at Bantanahal and the flock was increased by outside purchase. It will be further enlarged as the farm is developed and an attempt will be made to breed out some economic breeds. The stock of poultry at Coimbatore was increasing, but very slowly, owing to heavy losses from chicken-pox, which it seems impossible to keep down.

Fodder crops and grasses

Groundnut

Coconut

Miscellaneous crops

Live-stock

133. Researches were continued into the availability of mineral phosphates in paddy soils in conjunction with green manure. There are large deposits of mineral phosphates, in the form of nodules, in the Trichinopoly district within a few miles of the Tanjore Delta. Up to the present these nodules have been little used owing to the fact that they cannot profitably be converted into soluble superphosphates. Experiments made by the department showed the great possibilities of these deposits as a source of phosphatic manure which is readily used by the paddy plant. The study of the effect of manurial treatment on the composition of food-grains was continued, the grains from the permanent manurial plots at Coimbatore being analysed and the result indicating that phosphorus was the limiting factor. The analysis of the Kistna soil samples was completed. The most important work undertaken by the Chemical section of the Agricultural College during the year was the preparation for the Madras Exhibition held during Christmas, 1917, of substitutes for imported food and other products from local raw materials. The

Scientific research and experiments

Agricultural chemistry

Economic botany

Government Economic Botanist continued his experiments on paddy at the Paddy Breeding Station. As a result of his study of the inheritance of characters in paddy two points of special interest have been definitely proved, viz., a very definite connexion between a certain type of golden colouring and the shape and size of the grain and some connexion between another type of that colouring and duration of the plant. At Manganallur the selections from two varieties were tested for yield against the farm bulk selections for which there is already a great demand, especially in the Tanjore district. Certain of the selections yielded from 15 to 24 per cent higher than the farm seed and these have been selected for multiplication this year. The work on paddy is becoming more definite as experience is gained and will proceed at a faster rate in future. The annual value of the paddy crop in this Presidency exceeds sixty crores of rupees and the experiments now carried on show that this crop may eventually be increased by 20 per cent or so by the sowing of pure seeds of selected strains. The value and importance of these investigations cannot therefore be overrated.

Entomology

Several tours were made by the Government Entomologist and his staff to investigate insect pests—in particular pests of paddy—and to organize a campaign for spraying mangoes in the Vizagapatam district. Some further work was carried out on the stem weevil (Pempheres) which is so serious a pest of Cambodia cotton and which has invaded new districts, apparently with consignments of seeds; but so far no successful method of combating the pest had been discovered. No radical cure appears feasible against fresh water crabs which cause serious damage to paddy seedlings at Manganallur, but certain methods of control were adopted with success and these will have to be repeated each year. A start was made with apiculture and a small hive of the common Indian bee was established at Coimbatore.

Mycology

The experiments on the fungus causing secondary leaf fall in Hevea rubber were continued and an economically sound method of treatment devised. A number of other fungoid diseases of rubber were under investigation. Bleeding disease of coconut was found to be increasing in several districts and was under investigation.

Sugarcane breeding station

The season was a good one for arrowing and 421 different cane varieties were in flower as against 96 in the previous year. The number of seedlings raised from these was however 77,000 as against 99,000 in the previous year. The fall was due to the rejection of a large group of seedlings which have been proved to be useless. The year in fact marks the beginning of concentration on smaller numbers sufficient experience having been gained to admit of this. The number of canes selected from the previous years' crosses as being probably suited to Northern India was 150. Nearly 5,000 seedlings were grown to maturity and analysed for their sugar content, and about 11,000 analyses were made in the year. Investigation into the growth of canes both above and below ground and into methods of testing arrows for fertility was continued.

Aid to the public

Operations against disease

134. The system of examining for disease all palmyra trees in Kistna and Gōdāvari within fifty yards of previously recorded sources of infection was continued. Up to the end of May 1918 the examination was completed in all but thirty villages; but a disagreeable feature of the year was the discovery of a serious recrudescence of the disease in certain villages in Kistna which had been declared free from infection two years ago and removed from the area of operations of the special staff. There was a somewhat similar recrudescence in certain villages in the eastern Gōdāvari Delta and the adjacent uplands. This was due to the failure of village officials to report cases of disease promptly and the special staff was therefore suitably increased to deal with the recrudescence. The disease has been reduced to about the lowest terms possible with the available agency. The campaign against the Mahali disease on areca nuts and the preventive treatment against smut on cholam, cumbu and Italian millet was continued; but co-operation on the part of the ryots was lacking as they could not be induced to pay the cost of the operations.

Crops

The demand for sugarcane setts was increasing rapidly. Some 52,000 setts

were sold from the Anakāpalle and Samalkota farms and about 114,000 in the IV Circle. The area under cane cultivation was extended particularly in South Arcot where Messrs. Parry & Co. set up two out-stations for making jaggery, each installation being capable of dealing with some 700 acres of cane in a season. The price of cotton rose unexpectedly in March 1918 by nearly 75 per cent, and this brought great prosperity to the cotton districts. On the other hand it has led to much cotton—especially Cambodia—being grown on unsuitable land. The department continued its activities in the matter of supplying seeds to the ryots of good strains of cotton. In the Tinnevelly tract 2,320 acres were sown as seed farm in 1916–17 season to supply seed for this year's season as against 552 acres in the previous year. The large increase was due to the necessity of supplying large quantities of seed of a particular strain as a part of the campaign against pulichai. The end of the first stage of the work of the Agricultural Department is in sight, viz., the substitution of pure improved strains for the country cotton mixture. The latter will soon practically disappear and there will be ample seed of company cotton for every one. Measures will be taken to ensure that a continued supply of fresh seed is always available in order to prevent deterioration and the number of seed unions, which are progressing well, will be increased and scattered uniformly all over the cotton tract, so that they may supply the bulk of each year's seed. Over 160,000 lb. of seed paddy were sold from the various Government farms. The practice of reducing the seed rate of paddy has spread in all districts to such an extent as to render it beyond the capacity of the department to keep trace of it. A demand for concentrated manures for paddy is rapidly springing up, especially in the south, and several orders for the more expensive varieties were complied with by the department, although 234,363 lb. of seed of green manure crops were sold as compared with 166,457 lb. in the previous year ; and it is satisfactory that the demand continues to keep ahead of the department's powers of supply with the result that ryots are induced to provide for their own supplies of seed and private merchants take up the business to an increasing extent. Attempts to grow Daincha (*Sesbania aculeata*) on a large scale on seed farms failed almost without exception. The steadily rising price of all iron implements has stood in the way of any expansion in their sale to ryots.

Agricultural associations

135. In July 1917 a conference was held at Coimbatore of the gazetted officers of the Agricultural and Co-operative Credit Departments at which the lines on which the two departments could work more closely together were threshed out. The first points which were emphasized at the conference were that in the past one department has often exploited a tract which the other could not take up but that in future both should concentrate on the same tracts ; that in many tracts the progress of agricultural improvement was hampered by the poverty of the non-occupancy subtenants, who were the real cultivators of the soil and that it was essential that the Co-operative Credit Department should supply cheap credit to this class. The general lines were laid down on which co-operative societies could take up non-credit work of the nature of joint purchase of seed manures and implements and joint sale of agricultural produce and the methods were formulated in which the officers of the two departments should co-operate for this work. Some progress in this direction was made during the year and considerable experience gained.

Agricultural engineering

136. The Agricultural Engineering section was reorganized during the year and its sphere of work definitely separated from that of the Department of Industries. The continued rise in the price of machinery and the scarcity of oil fuel have prevented any expansion in the work of this section during the year ; and until the end of the war the department cannot hope to be able to do more than to maintain things as they are and prepare for future expansion. Some 57 enquiries from ryots regarding new pumping installations were received in the year, but all except five came to nothing owing to the difficulties set forth above. There

Pumping

were 23 installations under erection at the beginning of the year and 21 new installations were taken up during the year. Of these 44 only 8 comprised new machinery. The difficulty of obtaining steel pipes for lining

Boring

borings and the high price of those that could be had greatly hampered the extension of boring work. The department was in fact compelled to employ most of its boring sets in the inland districts where the sub-soil is mainly hard rock in which lining pipes are not needed, rather than in the coast districts where soft alluvial sub-soil makes lining pipes imperative. In consequence of this and in spite of an increase in the number of boring sets the total depth bored fell from 22,323 feet to 16,267 feet and the number of bore holes from 379 to 307. Only one of the two sugarcane crushing and jaggery making plants was in use during the year.

Finance

137. The receipts and expenditure of the department amounted to Rs. 1·63 lakhs and Rs. 7·76 lakhs, respectively.

Civil Veterinary department

138. At the close of the year the Civil Veterinary Department consisted of a Superintendent, two Deputy Superintendents (including the appointment created during the year on the formation of a second circle), twelve Inspectors (including the Glanders and Farcy Inspector attached to the Madras Veterinary College and the Assistant in Veterinary Science in the Agricultural College, Coimbatore) and 113 assistants. Sixteen graduates were newly entertained on the 1st March 1918. One Inspector and three assistants were on military duty throughout the year. In December 1917 there were 103 students in the Veterinary College. Seventeen out of the twenty-five candidates who appeared graduated from the College. The Principal of the College was in charge of the Office of the Superintendent, Civil Veterinary Department, in addition to his own duties for nine months from the middle of February 1917. Two dispensaries were opened at Palghat and Kumbakōnam and the number of these institutions at the close of the year was 39, excluding the Madras Veterinary College hospital. As in the previous year the hospitals at Berhampur and Rajahmundry and the dispensary at Tinnevelly did creditable work, the total number of in-patients and out-patients admitted in each of these institutions exceeding 2,000. There was a regrettable increase from 68,588 to 70,018 in cattle mortality from contagious disease, and this was due entirely to the ravages of rinderpest which has been increasing in severity during each of the last five years. There was a fall under every other head. The districts where the disease wrought most havoc were Anantapur, North Arcot, South Arcot, South Kanara, Malabar and Chingleput and in each of these additional assistants were posted to work from the reserve staff. The number of inoculations against hæmorrhagic septicæmia performed during the year was 12,807 as compared with 7,238 in the previous year. In horses glanders and surra were much more prevalent than they have ever been before and the Deputy Superintendents of the department were therefore appointed veterinary practitioners under the Glanders and Farcy Act of 1899. The Act has been extended to the whole Presidency in respect of surra, and this has enabled the department to take measures to prevent the spread of the disease. Enquiries were, however, in progress as to whether there was any use notifying only equines for surra under the Act as there was evidence to show that actual epidemics of the disease occur amongst bovines occasionally.

Madras Veterinary College

Hospitals and dispensaries

Diseases

Miscellaneous

Breeding operations

139. A Deputy Director of Live-Stock was appointed in the Agricultural Department for the control of all cattle-breeding operations. The seven stud bulls remaining in the department were disposed of during the year by sale and otherwise as none of them were required. The department has in the past devoted a good deal of its time and energies to pony-breeding operations. These have, however, been a failure owing to several causes and it was definitely decided during the year to abandon these activities. Two horse shows and twenty-four cattle fairs and shows were held in the year. The shows at Tiruppūr, Ongole and Madura were all successful.

Fairs and shows

WEATHER AND CROPS

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Season and Crop Report for fasli 1327; Agricultural Statistics of India; and Area and Yield of certain principal Crops in India*]

Rainfall

140. The year on the whole was favourable to agricultural operations. The south-west monsoon commenced earlier than usual, about the beginning of June, with good showers in the Northern Circars, the Deccan, the Carnatic, the Central group of districts excepting Coimbatore and Trichinopoly, the West Coast and the Hills. The early showers gave a good start for agricultural operations in most of the Circars and the Ceded districts. The rainfall in July was generally below the average in the majority of districts; that of August and September was generally above the average throughout the Presidency and was excessive in places. The total rainfall during this monsoon was above the average in all the districts except Vizagapatam Littoral and Malabar. The north-east monsoon commenced as usual in October with good showers throughout the Presidency, the rainfall in that month being above the average in the majority of districts. There was practically no rain in the Presidency in the first week of November except in the Circars. Prospects, however, improved during the second week and the improvement was maintained till the last week of the month, when the weather became dry in the Circars and in the Deccan. The fall in November was above the average in many of the districts and the monsoon began to slacken by the beginning of December and gradually ceased towards the close of the month. The total rainfall during this monsoon was above the average in the Deccan, Nellore, the West Coast and the Circars and was excessive in parts of Gōdāvari and Guntūr. The dry and the hot weather rains were above the average in the majority of districts. The heavy fall in May on the West Coast caused damage to standing crops in Malabar.

Crops

141. There was an increase of cultivation in many districts, but on account of the abnormally heavy rainfall in both the monsoons, especially in the south-west, standing crops were considerably affected in the Gōdāvari and the Kistna deltas and in the Deccan excepting Cuddapah. Submersion of crops by floods occurred in Ganjām and Kurnool. In Kistna particularly, there were floods in some of the lakes which necessitated the grant of remission on a large scale in five taluks; while in eight districts season remissions had to be granted. Further, the excess of rainfall also affected the outturn of crops in several districts, in eight of which it was below the normal. The area under first crop cultivation was 34,056,000 acres as against a normal extent of 33,767,000 acres. The total cropped area was 38,821,000 acres as against a normal area of 38,166,000 acres. Increases occurred under paddy, groundnut, sugarcane, cotton, indigo and tobacco, while there was a fall in the acreage under cholam, cumbu, ragi, gingelly and castors including lamp oil seeds. The increase under paddy was due to the general extension of wet cultivation, particularly in two districts, in which there was a marked rise of over 250,000 acres in the aggregate; the increase under sugarcane was consequent on the demand for locally manufactured jaggery on account of the decrease in the import of foreign sugar; and that under cotton was attributable to the high prices fetched by Cambodia at the close of the previous season and the great demand from Japan. The stoppage of the import of synthetic indigo from Germany gave a boom to the natural product and the extent under this crop, which at first gave indications of an abnormal increase, decreased in some of the Circars and the Ceded districts owing to the fall in prices. The increase in the extent under tobacco is ascribed to the lucrative nature of the crop and to its larger cultivation on dry lands under wells. The general fall in the area cultivated with dry food-grains and pulses was due to the preference shown in some districts for groundnut, cotton and indigo and for paddy where a good supply of water was available in the irrigation sources and to the abnormal season in certain other districts.

HORTICULTURE (1917–18)

[*G.Os. No. 2522, Revenue, dated the 4th July 1918, and No. 3287, Revenue, dated the 20th September 1918; Report of the Agri-Horticultural Society of Madras for 1917*]

Government Botanic Gardens and Parks, the Nilgiris

142. The labour difficulty in the Botanic Gardens at Ootacamund continued to be acute, and progress during the year was therefore on the economic rather than on the botanical side as evidenced by the cultivation of medicinal plants and the starting of a potato seed farm. The conservatories always contained orchids in bloom and the show of bloom in the upper conservatory was above the usual standard. A collection of new *Cinerarias* raised from imported seed made a fine show during February and March 1918. The plants were still at their best at the close of the year. The conservatories were constantly fed with fresh plants from the extensive range of nursery glass-houses at the top of the garden and were much appreciated by the public. The flower beds in the garden were as usual kept filled with plants and during July made a magnificent show, the unusually light rainfall that month being extremely favourable for the production of bloom. The potato garden was treated with cattle manure which improved the outturn. Out of 16 varieties planted, only two produced a lower return than in 1916–17 and this is attributed to a much larger quantity having been planted this year on ground which was exposed to wind. Efforts were made to obtain seeds of medicinal plants and several species were obtained and tried with varying success. In the Government Parks, the young trees were more thoroughly fenced in to protect them from stray cattle. Great difficulty was experienced also in Sim's Park, Coonoor, in obtaining suitable labour. More than the usual attention was paid to the young trees and shrubs in this park and several new species were planted. The turf was maintained in very fair order. The fruit trees grew fairly well and the plums planted in 1912 produced for the first time a good crop of fruit. Plums and peaches were propagated to supply the demand for fruit trees. On the whole the fruit trees grew satisfactorily and responded to liberal treatment with manure. In the Burliar experimental garden the removal of rubber trees was continued and the land cleared was terraced. Seedless bread-fruit plants were introduced and the mangosteen crop was again a good one, Rs. 571 having been realized from these. Fifty pounds of dry cocoa beans were collected, 17 lb. were sold and 12 lb. were supplied gratis to the Ootacamund War Fête. Many hundreds of cocoa seedlings were raised. The rubber trees in the Kullar experimental garden were tapped and 91 lb. of dry rubber obtained. During the year 352 lb. of rubber were sold for Rs. 554. A number of fruit trees were planted and the nursery beds filled with medicinal plants. The orange trees bore a good crop of excellent fruit, the sale of which realized Rs. 656. Most of the coffee plants at Benhope produced berries, but as hybridization had not yet been commenced they were of little value. Over 100 lb. of green leaves of *gaultheria fragrantissima* were collected and supplied to the Medical Storekeeper to the Government of Madras for the experimental distillation of gaultheria (winter green) oil. A small quantity was also distilled in the Botanic Gardens and a sample of this which was sent to the Medical Storekeeper was favourably reported on. A seed potato farm was established in Nanjanad village, Ootacamund, work was commenced in October and its progress watched with interest. The selection of suitable sites for fruit farms on the Nilgiris was engaging the attention of the Curator. The receipts in all amounted to Rs. 7,482 and the expenditure to Rs. 29,089.

The Agri-Horticultural Society, Madras (1917)

143. In the Agri-Horticultural Society's garden at Madras, several thousands of seedlings of annuals were raised during the year, but the continuous fall of rain and stormy weather destroyed and damaged a large number. The *Rosarium* was maintained in good condition and the older bushes were replaced by young plants. These bushes of roses supplied during the year the bulk of the flower orders for bouquets,

wreaths, crosses, button-holes and cut flowers. Fairly successful experiments were made in growing pears, peaches, plums, figs and other fruit trees. The income of the Society from all sources, excluding the Government grant, was Rs. 12,388, or Rs. 202 less than in 1916. This was due to economies adopted by the public and all Government departments during the war and to the absence of remunerative out-door work. The Government grant amounted to Rs. 5,800. The expenditure was Rs. 20,100 and the year closed with a balance of Rs. 1,041. The seventy-eighth annual flower show held on the 24th February was a one-day show. Business continued to be bad and sales decreased. Much less municipal water was used this year than in 1916, resulting in a saving of Rs. 225-12-0.

Government cinchona plantations

144. The Government cinchona plantations were reorganized during the year into the Dodabetta and Naduvattam plantations. The first comprises the Dodabetta and Kukal divisions and the second the Naduvattam and Hooker divisions. In view of the scarcity of bark the area under cultivation was increased by 235 acres. Fifty-four acres were uprooted and the acreage at the end of the year was 1,188 acres (Dodabetta plantation 253 acres and Naduvattam plantation 935 acres) against 1,007 at the beginning of the year. Under a scheme of reafforestation there was an area of about 700 acres, mostly of *Eucalyptus globulus* and *Grevillea robusta*. On Dodabetta 30 acres of *Cinchona officinalis* were planted and 40 acres of exhausted land were reafforested. On Naduvattam division 100 acres of *Cinchona robusta* were put out and this area was interplanted with nearly a lakh of seedlings of silver oak ; 65 acres of land which had been for ten years under silver oak were prepared for planting with cinchona in 1918-19. In Hooker division 105 acres of cinchona were planted ; 138 acres of scrub land in the old Wood estate were felled to receive cinchona trees. Very little bark was again taken from the plantations, the actual quantity being 87,037 lb. (Dodabetta 18,468 lb. and Naduvattam 68,569 lb.). The year was a busy and exceptionally prosperous one.

Quinine factory

The restrictions on shipping led to an increasing demand for the products of the Government Cinchona Factory resulting in sales of over Rs. 11 lakhs. The total quantity of cinchona bark worked up was 1,284,351 lb., of which the average analysis was 4·59 per cent sulphate of quinine. The output of quinine rose from 52,513 lb. in 1916-17 to 55,014 lb., an increase of over one ton, which gives an outturn figure of 93 per cent against 92·8 in the previous year. The increase was accomplished without any addition to the manufacturing plant. Over 20,000 lb. of quinine were sent to the Medical Stores, Bombay, a large part of this being meant for the army in Mesopotamia and East Africa. The quantities of the various products manufactured were 48,920 lb. of quinine sulphate, 1,567 lb. of quinine hydrochloride, 160 lb. of quinine bi-hydrochloride, 4,725 lb. of quinine sulphate tablets and 84 lb. of quinoidine.

Finance

The gross receipts were Rs. 11·78 lakhs and the total expenditure Rs. 4·13 lakhs, of which the expenditure on factory account amounted to Rs. 3·29 lakhs. There was an increase of over 10 per cent in the sales of pice packets at the post offices, the quantity disposed of being 3,441 lb.

FISHERIES

[1ST APRIL 1917 TO 30TH JUNE 1918]

[*Administration Report of the Fisheries Department for 1917-18 ; G.O. No. 3461, Revenue, dated the 17th October 1918*]

General

145. The principal administrative event of the year was the separation of the Government Soap Works at Calicut from the Department of Fisheries and their affiliation to the Department of Industries. They, however, remained under the general supervision of the Honorary

Director of Fisheries in his individual capacity. The Director's branch had charge of the general control of the department and also of the Tanur fish-curing yard, the Chaliyam (Beypore) cannery and socio-economic work. The Marine Biologist ran the Tuticorin fish farm and the edible oyster farm at Pulicat and undertook also the preparation of marine zoological specimens for educational work, beche-de-mer preparation, scientific and practical investigations and the writing of bulletins. As Superintendent of Pearl and Chank Fisheries, he was in charge of the pearl and chank work over the whole coast from Madras to Cape Comorin. The fish farms at Sunkesula and Ippur were under the supervision of the Assistant Director, who undertook also larvicidal work and a variety of breeding and cultural operations and economic experiments. At the Madras Industrial Exhibition, 1917–18, the department was awarded a gold medal and the diploma of excellence for canned and cured fish.

The West Coast stations

146. At Tanur cannery operations were somewhat larger than in the previous year, but quite insufficient to meet the general demand although the net profit was considerably greater than in 1916–17. An experimental scheme for the refrigeration of cheap shoal fish, sardines, mackerel, cat fish, etc., was elaborated at that station and freezing tanks were built in order to determine whether cheap but good and fresh fish can be successfully placed in distant markets by sharp freezing in ice and salt and in an extended zone of adjacent markets by simple chilling. Owing to the war and the consequent absence of freight and in part also to short distribution and lessened fat contents in the fish many of the numerous private oil and guano factories which have sprung up since, and in consequence of, the department's operations have had very bad times either from want of products or from inability to sell them, guano falling in price by nearly 60 per cent and oil by nearly 75 per cent. Fortunately the Controller of Munitions made requisitions upon the department for oil for military purposes and this, coupled with a sudden demand by the jute mills, brought prices back to normal. A similar restoration to normal conditions was effected in the case of guano by the formation of groups of producers acting as intermediaries for large customers. These groups will be formed into co-operative societies and will thus be further consolidated.

Pisciculture work

147. A notable feature of the year in the Sunkesula fish farm was the successful breeding of the highly esteemed species *Etroplus suratensis* by providing artificial nests made of Cuddapah slabs. The operations have been so successful as to render it possible to stock the Kurnool-Cuddapah canal and tanks in the neighbourhood with the fry. This species was also raised in the ponds at the old Powder Factory, Madras, from which and from the Sunkesula farm many permanent water tanks in the districts of Kurnool, Cuddapah, Bellary, Salem, Chingleput and North Arcot were stocked with fish. During the year, the Gourami introduced into the old Powder Factory farm from Java and Mauritius two years ago bred for the first time. The species also began to breed in the tanks covered by the Pudur scheme, but in the absence of extensive rearing grounds, the provision of which is under investigation, the fry had to be transported to Ippur. The work of the Ippur fish farm progressed satisfactorily. It held a large head of Gourami and larvicides and was the main source of supply of the latter to the public and to local bodies in the Presidency. A number of estuarine food fish of indigenous species were being acclimatized to fresh water at the Ippur and Powder Factory farms for introduction into inland waters. One of the largest and esteemed local carp *Catla catla* which is non-indigenous to waters south of the Kistna was being introduced into a series of tanks in the south. An anti-malarial *cum* piscicultural scheme was started during the year at the Vellore Fort moat. Owing to the failure of seasonal floods in the Coleroon, the Hilsa fishery was almost a failure. The Avalanche hatchery on the Nilgiris was visited during the year and trout fingerlings were transferred as usual from the fry ponds to the streams.

148. The agile Malabar canoe and large nets in use on the West Coast are especially fitted for the capture of valuable shoal fish and a very useful experiment was made during the year in bringing two such canoes, nets and men to Madras to fish Madras waters with the harbour as base. A large amount of fish was caught, but the operations were not a success from a financial point of view on account of the cost of bringing over boats and men and the high wages paid to them. The experiments will be continued on a larger scale and for a longer period, local crews being recruited if possible, and other boats and nets, lines and methods tried. One of the great drawbacks in tank fishing is the inability of the local fishermen due to their primitive methods and implements to capture fish except when a tank is about to dry up. With a view to remedying the evil, experiments were initiated during the year in some of the large irrigation tanks near Madras to devise methods and implements to fish tanks throughout the year. The live-fish market at Kurnool was reopened during the year for the sale of fish from July to January when fish is scarce in Kurnool and two ponds for storing the fish were under construction. The food fish in the Ippur Kamini tank was fished departmentally and marketed.

Fishing experiments

149. The quality of the Tinnevelly chank shells continued to be most excellent and they maintained their reputation as the first in all round size and quality yielded by any fishery in India and Ceylon. But there was a marked drop in the yield owing to the unfavourable nature of the weather from the beginning of January to the middle of March which affected adversely the worms that constitute the food of the chank and resulted in the scattering of the latter in search of food. On the other hand good results were obtained at the Rāmnād Chank Fishery which compensated amply for the poor harvest of the Tinnevelly beds. Four crews of divers were sent to participate in the Ceylon Fishery during the three months ending October 1917, partly to prevent the Tuticorin divers from drifting away to other employments during the six months when fishing cannot be carried on at Tuticorin and partly to gain exact knowledge of the fishing stations and general course of operations in the chank fishery in Ceylon. The experiment more than paid its way. At Tirupalakudi a beche-de-mer fishery was carried on in conjunction with the chank fishery. But the industry cannot be successfully run until after the return of normal conditions. A search for pearl oysters was again made during the year in the banks off the Tinnevelly coast but none save a few scattered ones were found. At the Pulicat Oyster park the collection of spat and the supply of cultivated oysters continued to be carried on. The appreciation of their quality and of the care taken in cultivation resulted in a considerable extension of sales and in a further reduction of the initial loss which was incurred in working the industry. An increasing demand is springing up for zoological specimens and the activities of the department in supplying such specimens at a little over cost price continued to expand during the year.

Marine work

150. At the beginning of the year there were in existence on the West Coast seven credit societies all based on thrift. Three credit societies and one productive society were registered during the year. Three co-operative societies were formed among the fishermen of the Rāmnād district, many of whom were divers who participated in the Rāmēswaram fishery. Two temperance societies continued to do good work of a practical nature and their activities combined with a scheme for the education of the village boys which is occupying attention hold out great promise of bettering the condition and outlook of the fishing population.

Socio-economic work

THE GOVERNMENT SOAP WORKS (1917–18)

151. The year was a fairly prosperous one and there was considerable increase of business in the factory at Calicut. The quantity of soap made was a little over 227 tons, and with the balance of the previous year there was a total quantity of 261 tons of which 229 tons were sold. "Vegetol" continued to be the most popular, and a little over 111 tons of it were sold during the year and arrangements were made to stock it for sale in the remotest villages and hamlets. A little over 96 tons of "Washwell" was sold, of which not less than 40 tons were taken over by the military department for the use of our troops in Mesopotamia and elsewhere. There was an enormous demand for this soap from all parts of the Presidency which could not be met owing to the small output. Small quantities of "Coal Tar" and "Milled Toilet" soaps were also manufactured and sold. The manufacture of fish oil soap had to be considerably restricted owing to the scarcity of chemicals. Progress in glycerine recovery was again slow owing to the absence of a suitable recovery plant. The establishment of a larger factory capable of turning out about 12 tons of soap per week has been sanctioned. It will be located at Calicut as the West Coast coconut oil, with the proper blending of other oils, yields a soap of unsurpassed and generally unequalled purity and lathering power and the articles turned out at the present factory have, on account of their excellence and cheapness, been remarkably growing in popularity. The Government soap factory has tempted capitalists from all parts of India and outside to start soap and allied industries in the Presidency, and the success of the former will in future be gauged not by its own profits but by the profits of others, by the number of men whom it can and does train and send out, and by the number of private factories which it can stimulate into successful and profitable being.

FORESTS

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Annual Administration Report of the Forest Department of the Madras Presidency for the year ending the 30th June 1918; Statistics of British India, Part IV (b)—Finance and Revenue*]

Area

152. The present policy of Government is to abandon small isolated reserves and to convert all valuable unreserved lands into reserved forests. In pursuance of this policy about 71 square miles were notified during the year under section 16 of the Forest Act. About 39 square miles were disafforested. Where possible, forest panchayats were formed for such areas, and in some cases the grazing fees were raised in order to induce the villagers to take them upon panchayat, Where panchayats cannot be formed the areas will be given up altogether. The total area of reserved forests increased slightly, by 28 square miles, to 18,838 square miles. The area of reserved lands further fell, by 57 square miles, to 668 square miles chiefly owing to the transfer of a large area to reserved forests. Only five square miles were finally settled during the year out of an area of 493 square miles. Of the remaining 488 square miles three blocks covering 418 square miles in the northern circle were still pending settlement. Two of them were once settled but the settlement was found faulty and the re-settlement of one of them was completed at the close of the year but the final notification in respect of it was not ready for submission. In the central circle three blocks in Anantapur, one in West Cuddapah and five in Nellore were finally settled. In the southern circle settlement was complete in all districts except North and South Salem. In the western circle five blocks aggregating ·186 square mile were finally settled and transferred to reserved forests. The balance

Forest settlement

under settlement was seven blocks of 4·07 square miles, but the settlement of six of these was practically completed. At the close of the year there was a total length of 35,195 miles of forest boundaries, of which 1,882 miles constituted natural boundaries not requiring artificial mark. There were 32,869 miles of artificially-marked boundaries, of which 60 miles were demarcated and 446 miles remained still to be demarcated at the close of the year, one-half of which was in Kollegal. A length of 17,996 miles of old boundaries was repaired during the year, as against 18,808 miles in 1916-17, of which 15,542 miles, or 3,283, more than in the previous year, were cleared by subordinates free of cost. There was a considerable rise in the average cost per mile of fresh demarcation and of repairs, the former rising from Rs. 37-1-8 to Rs. 96 and the latter from Rs. 3-3-2 to Rs. 7-10-8. In the northern circle the Survey of India did no work during the year on account of the war and in the southern circle no surveys were undertaken except in Tinnevelly where the party surveyed the boundary line between Singampatti and Travancore and a portion of the line between Singampatti and Kalakad forests. In the central circle the party completed its operations in the Nellore district, the year's outturn being the survey of 45 square miles on the 4-inch scale and 134 square miles on the 2-inch scale. The party also worked in South Cuddapah and surveyed 30 square miles on the 2-inch scale. In the western circle the special surveyor deputed by the party completed the final (plane table) survey of eight plantations in two ranges in South Malabar. The Madras Survey Party continued revision survey operations in South Vellore, South Arcot and Madura, and departmental surveyors undertook, as usual, a variety of miscellaneous work such as the survey of coupes and block lines, the verification and rectification of boundaries and the preparation of working plan and fire maps. The shortage of officers during the war and the dislocation of work caused by the requirements of the Indian Defence Force Act prevented much progress being made with working plans. Plans covering only 273 square miles were sanctioned during the year. Over 6,360 square miles, or about one-third of the area of the reserved forests of the Presidency, are not under any working plans. In Ganjām the collection of data and statistics for the preparation of a regular plan for the sâl forests was continued. The reconnaissance report was prepared and approved and the final plan was under preparation. In South Coimbatore working plans were completed for the Tekkadi leased forests and the Mount Stuart Ghat forests. The revision of the working plan for Begur forests in North Malabar was taken up during the year and in South Malabar the preparation of a revised working plan for the teak plantations and the adjoining natural forests was in progress. Useful working plans already exist for some of the chief sandal areas and during the year a working plan was sanctioned for the South Salem sandal forests. Little progress could be made during the year with the Tinnevelly working plan as the officer in charge was frequently called away for military duties. The reconnaissance report for the revision of the Kuttalam working plans was approved and the plan was under preparation.

Demarcation

Surveys

Working plans

153. Strict economy was exercised in expenditure and only Rs. 1·55 lakhs were spent on roads and communications as against Rs. 1·62 lakhs in the previous year. The expenditure on buildings rose from Rs. 1·02 lakhs to Rs. 1·16 lakhs, the increase being chiefly due to the construction of quarters for subordinates in the Javadis and sandalwood godowns. The important road to Kommatiyeri in the Javadis was ready for opening and the Forest Engineer was completing the plans and estimates for the proposed steam tramway from Anamalai road station to the Mount Stuart forests which is expected to cost about Rs. 6½ lakhs, including the cost of construction of permanent way, rolling stock, buildings, and wells and the acquisition of land. The laying of temporary tram lines in connexion with the transport of fuel in Sriharikota forest and in the coast casuarina plantations in the Nellore district was continued and 4,105 tons were transported from the former as against 3,765 tons in the

Communications and buildings

previous year. The bullock tramway in Tekkadi leased forests was further extended for four furlongs. No other new works of any magnitude were undertaken during the year, but programmes for opening up the forests of Cuddapah and Kurnool were called for with a view to increasing and cheapening the supply of fuel and timber in those districts.

Protection of forests

Offences

154. The total number of offences reported during the year fell, by 996, to 27,091. The decrease is attributed generally to better protection although in a few districts other special causes are said to have operated to bring about this result. The formation of forest panchayats for forests in which grazing is the chief consideration must also have been a contributory factor. Unauthorized fellings formed the largest head of forest crime in all the circles. There was a satisfactory decrease under unauthorized grazing although cases were numerous in the central circle, especially in four districts where large numbers of goats are kept. The percentage of cases which were taken to court rose from 22·13 to 24·16, while that of cases compounded fell from 71·08 to 68·59. There was a slight rise, from 6·79 to 7·25, in the percentage of cases which were undetected. The total number of cases disposed of by Magistrates fell, by 767, to 6,671, while there was also a fall from 94 to 91·66 in the percentage of conviction. Rewards amounting to Rs. 1,122 were granted to informers and forest subordinates as against Rs. 772 in the previous year. The season was generally speaking dry and unfavourable to protection. Out of 7.142 square miles over which special protection was attempted 696 square miles were burnt. Instances of deliberate incendiarism were reported from three of the Ceded districts and from Nellore. The hill tribes in Ganjām, Gōdāvari and South Coimbatore were helpful in putting out fires. In South Kurnool the Chentsus did good work but in West Kurnool they were responsible for many fires. In addition to the specially protected areas, ordinary protection was attempted over 8,811 square miles and was successful over 8,059 square miles. The total number of offences connected with injury to forests by fire showed an appreciable increase (234) over that of the previous year and as many as 93 per cent of the cases remained undetected.

Grazing

The number of animals for which grazing licences were issued fell by 222,367 to 2,482,592. The decrease was partly due to the transfer of reserves to panchayats, to the extension of the kancha and forest village systems and to the success of the attempts made to reduce the excessive incidence of grazing in many of the reserves by the introduction of grazing schemes. The kancha system worked well in the Nellore district and was being introduced into the Chingleput district. Thirty-three silver medals and cash rewards amounting to Rs. 2,383 were awarded for good protection and were much appreciated. Defaulting kanchadars were fined where protection was specially bad. A special Extra Assistant Conservator was deputed to popularize the system and to hold the kancha sales. There were 370 kancha leases covering 256,379 acres open to grazing and 5,627 acres of forest closed to grazing were entrusted to kanchadars for protection. The aggregate receipts for the whole Presidency under grazing fees rose from Rs. 7·04 lakhs to Rs. 7·40 lakhs. The increase was consequent upon the enhanced grazing fees imposed in several districts with the object of stimulating the formation of panchayats and the introduction of the Forest Village system. Refunds amounting to Rs. 6,720 were granted to those forest villages which had earned it by good protection. The number of cattle impounded fell, by 24,106, to 118,806 and was 7 per cent in a total of 1,620,964 head of cattle which grazed in the forests either free or on payment.

Sylviculture

155. The areas under the various sylvicultural systems during the year were : clear felling, 130 square miles ; selection felling, 1,016 square miles ; simple coppice, 690 square miles ; coppice with standards, 1,807 square miles ; and improvement fellings, 1,224 square miles. In order to ensure the systematic working of these areas under the guidance of an

officer having a thorough knowledge of the sylviculture of the chief species, the appointment of a Provincial Sylviculturist was sanctioned during the year. Natural reproduction was satisfactory during the year in several districts in respect of teak, sandalwood and other species. At Nilambur the 27 acres of mature teak plantations felled in the previous year were successfully replanted and 17 acres were clear-felled and replanted. The regeneration of the natural forests at Nedungayam was also commenced, 46 acres of forests being sold for clear felling and with the intention of planting teak but owing to the abnormally early monsoon only 10 acres could be got ready for planting. Some experimental planting of *Terminalias* and other species besides teak was undertaken here as portions of the land are unsuited to teak. In all 69 acres were planted during the year in the Presidency. Other cultural operations were carried on over 9,086 acres.

Exploitation

156. Fuel coupes amounting to about 2,500 square miles were worked over during the year in addition to which a large quantity of fuel was worked out from the improvement fellings in Cuddapah and other districts. At Nilambur in South Malabar 70 acres of teak plantations were felled and in the Amarampalem reserve in the same district 46 acres of natural forest were clear-felled for the formation of a teak plantation. Fellings were also begun in the Karimpoya reserve to supply timber to the Munitions Board and 10,720 cubic feet were supplied to the Board from Tekkadi forests. The rest of the timber extracted was from selection and improvement fellings. Sandalwood has risen in price during the war and is now an important item of revenue. The value of the wood sold was Rs. 1·76 lakhs in 1914–15 and in 1917–18 it was Rs. 5·24 lakhs. This increased income was partly due to the higher prices and partly to the more systematic working of the Javadis and the North Salem areas under the new working plans and also to the large number of sandalwood trees blown down during the cyclone of November 1916. Bamboos are becoming an important item of revenue and the value of those sold during the year was Rs. 3·25 lakhs. The business of marketing *Cassia auriculata* and *Cassia fistula* was entirely handed over to the Munitions Board in return for a fixed payment based on the average revenue derived by the Forest Department from tan stuffs during the five years preceding the war. This arrangement necessarily involved a financial loss to the department of about Rs. 3 lakhs as compared with the previous year, which is part of the Madras contribution to the war. Large quantities of the bark of *Anogeissus latifolia* was also supplied to the Munitions Board for tanning purposes. The work of hay making which had been abandoned by the department under the orders of Government was taken up during the year in several districts of the Presidency to meet the requirements of the Army and about 2,500 tons of hay were supplied to the Military Grass Farms Department. The output of timber was 4·243 million cubic feet against 4·3 million cubic feet in the previous year and over 23 million cubic feet of fuel were removed from the forests as against 21 million cubic feet in 1916–17. Excluding the quantities extracted for the benefit of free grantees or right holders the output of timber and fuel was 26·476 million cubic feet as against 24·531 million cubic feet in the previous year. The districts which contributed chiefly to the increase in departmentally felled timber were South Malabar and South Coimbatore. Fuel was extracted departmentally chiefly in the Nilgiris. The value of the bamboos extracted departmentally increased by Rs. 5,623, while that of the produce removed by purchasers decreased by Rs. 19,883. The value of minor produce removed by departmental agency increased by Rs. 1·52 lakhs and that removed by purchasers by Rs. 1·69 lakhs. The high prices realized for tanning barks, the enhancement of grazing fees in several districts and the sale of hay to the Military Department chiefly contributed to the increase. The estimated value of forest produce removed by right holders and that of produce granted free fell from Rs. 55,684 and Rs. 47,766 respectively to Rs. 52,225 and Rs. 39,591.

Fuel

Timber

Sandalwood

Bamboos

Tanning stuffs

Hay making

Output

Finance

157. The financial results of the year were noteworthy. The gross revenue was Rs. 54·16 lakhs, an increase of Rs. 6·37 lakhs over that of the previous year. This increase was chiefly due to the high price of sandal, the sale of teak from the Nilambur plantations, the manufacture of hay for the Army, and the sale of forests no longer considered worth preserving in the South Arcot and Trichinopoly districts. The total expenditure was Rs. 29·20 lakhs and the net surplus rose from Rs. 19·95 lakhs to Rs. 24·97 lakhs, the highest on record.

Research and experiments

158. Experiments made during the year with *Sal* wood and with *Euphorbia* showed that the former was useless for making casks, being too brittle and porous, and that the latter was a failure as a pencil wood, being too knotty. The experiments initiated by the Imperial Sylviculturist for the purpose of determining the girth increment and development of heavily thinned red sanders and the conditions best suited for the natural regeneration of this species were concluded. Experiments in the inoculation of *Butea frondosa* and *Zizyphus xylopyza* with lac culture were made by the Government Entomologist in the Central Coimbatore division in consultation with the District Forest Officer. Thinnings of bamboo clumps were continued in certain reserves in the southern circle. Many of the tan stuffs which abound in that circle were tested and analysed by the Tanning Expert. The analyses made in the Leather Trade School show that *Anogeissus latifolia* bark contains a high percentage of tannin. The leaves of the same tree are also a valuable tanning material and it is possible that a trade in this may be developed both for local use and for export to Europe.

Miscellaneous

159. Though the forests have all been classified in accordance with the recommendations of the Forest Committee, revision will prove necessary in some of the districts, specially in the central circle. The number of forest panchayats increased from 290 to 334 and the area under their management from 479 square miles to 496 square miles of reserved forests and unreserved lands. The chief irregularities reported were over-grazing, goat browsing, illicit felling of trees and removal of manure leaves. Only five panchayats were dissolved and the areas under their management were resumed on account of misconduct. The dissolution of a panchayat in Kistna and the resumption of the forest is reported to have had a salutary effect on the other panchayats in the district. In some cases the grazing fees have been raised in order to put pressure on the villagers to take up the forests on panchayat management. The results of the special Chentsu officer's work during the year were very promising and the period of his deputation has been further extended by two years. The period of the special duty of the Extra Assistant Conservator engaged in the investigation of "spike" in sandal was extended to October 1919. The efficiency of the department and the development of the forests have been retarded by the absence of many officers on military duty. During the year the sanction of the Secretary of State was received for the reorganization of the controlling staff of the department the cadre of which has been augmented by ten Imperial posts, including a Chief Conservator and ten Provincial posts.

Forest College, Coimbatore

160. The College continued to work satisfactorily. Out of the twenty-seven students who appeared for the final examination two Government students won the honours certificate, and one of them received several prizes. Twenty obtained the higher standard certificate and five the lower standard. The remarks of the examiners go to show that the instruction was thorough and that greater attention was paid to the practical side of the training; in the men at the bottom of the list however a lack of either intelligence or general education betrayed itself. The 1917—19 division started in August 1917 with thirty-three students of whom five were found unfit to continue the training and were weeded out by the close of the first term.

MINES (1917)

[*G.O. No. 1697, Revenue, dated the 2nd May 1918; Statistics of British India, Part I, Industrial—Mines*]

Output

161. As in the previous year mining was carried on only in five districts—Anantapur, Kurnool, Nellore, Salem and Vizagapatam ; and the minerals raised consisted as in the previous year of gold, manganese, magnesite, mica and steatite. There was no change in the small quantity of the last-mentioned mineral raised during the year. The output of magnesite in Salem rose, by 2,794 tons, to 16,048 tons, while there was a fall in the output of the other minerals. Manganese decreased, by 1,073 tons, to 1,682 tons in consequence of the closure of two mines at Vizagapatam and mica in Nellore fell, by 519 tons, to 298 tons as a large number of lessees of mines in patta land gave up operations as unprofitable and as general difficulty was felt by miners in financing their business. In Anantapur, 52,000 tons of quartz were raised from which 20,529 ounces (Troy) of fine gold and 1,281 ounces (Troy) of fine silver were extracted, the total output of both the minerals falling short of the previous year's figure by 1,842 ounces.

General condition of the employees

162. In Kurnool and Salem there were no epidemics. There were two cases of small-pox in Vizagapatam both of which recovered and there was some chicken-pox in one mine in the Nellore district. In Anantapur there were nine cases of cholera, six of which proved fatal : and cases of malaria were frequent between February and May. On the whole the general health of the employees continued to be good. In Vizagapatam and Nellore wages were normal. In the North Anantapur Gold mines the rate of wages underwent a change but it showed no marked variations in the other mines of the district. There was a slight rise in the scale of wages paid for unskilled labour in the Salem magnesite works : and in the mica mines of Nellore there was a substantial rise in the rates of wages allowed for underground male coolies and for surface coolies. The supply of labour was adequate throughout. Neither women nor children were employed below ground in Anantapur or in the mica mines of Salem and no children were employed at all in Kurnool. Women were employed below ground in Kurnool and both women and children were so employed in Vizagapatam, Nellore and in the magnesite mines in Salem. A boy was accidentally killed in Nellore and another was seriously injured. In Anantapur seven persons were killed and eleven seriously injured. In Salem one boy was injured and, as in the previous year, there were no accidents in Kurnool or Vizagapatam.

Wages

Employment of women and children

Accidents

MANUFACTURES (1917-18)

[*G.Os. No. 491, Home (Education), dated the 17th April 1918, and No. 783, Home (Education), dated the 17th June 1918*]

General

163. Agriculture is the chief occupation of the people of the Madras Presidency and the proportion of the population which takes to industries is small. Of the existing industries spinning and weaving is one of the largest. There were eighteen mills in the Presidency inclusive of four in the French Settlements and one in the Cochin State, which employed on the average nearly 23,000 hands daily and had over 2,600 power looms and nearly 405,000 spindles at work. All excepting one of these concerns were worked as Joint Stock Companies. Besides these there were eight spinning and weaving concerns in Malabar, South Kanara and Travancore which employed over 1,000 hands but were not classed as mills. All these mills were fully engaged during the year in meeting army demands. Mention may be made in particular of the Buckingham and the Carnatic Mills in Madras which practically abandoned their civil connexion in order to devote themselves to the supply of clothing materials required by the army. The

Spinning and weaving

hand-loom weaving industry was however depressed by the very high price of yarn and shortage of dyes. Many looms were idle and there was an exodus of some weavers to the Calcutta Jute Mills from two districts of the Northern Circars. The three Jute Mills in the Northern Circars continued to work during the year. There were sixteen tanneries at work which gave employment to over 3,500 hands. Three of them came under the Factories Act. The tanning and leather industries of the Presidency enjoyed a period of great prosperity owing to the demands of the war office for tanned hides and of the Military departments in India for leather accoutrements of all descriptions. Many of the skin tanners were able to use their tanneries for the tanning of hides and three companies were engaged in Madras City in turning out very large quantities of leather accoutrements to meet military needs. The coir industry was represented by twenty concerns, all on the West Coast, including the Native States of Travancore and Cochin, six of which came under the Factories Act. They were engaged in the pressing and baling of coir yarn and in the manufacture of coir mats and matting and employed over 4,000 hands in all. The twisting of fibre into yarn is an important cottage industry on the West Coast, which was adversely affected by the slackness of the demand in the United Kingdom, owing, it is believed, to the existence of large stocks in London. The department of industries however placed large orders with these firms for articles required by the military department, and supplied 150,000 square yards of coir screening every month for camouflage purposes in France, 32,613 yards of coir matting, 61,786 fathoms of coir rope, 200 tons of coir string and 5,000 coir antifriction mats. There were nineteen coffee works which gave employment to some 5,400 operatives; thirteen of these came under the Factories Act. Some of them carried on other operations also, such as pepper and ginger bleaching and the preparing of fertilisers and general produce. The number of cotton ginning and pressing mills was 156, in which over 13,500 hands were employed. Many of them did also groundnut shelling and rice milling. There were 147 rice mills which employed over 9,000 operatives, but this number excludes many small concerns which have not been registered. The rice milling industry has developed rapidly in recent years, particularly in the Tanjore and Kistna districts. As recently as 1910 there were in the former district only some four or five mills worked by power and nearly the whole of the paddy grown in the delta was husked by hand. There are now some 215 mills representing an aggregate horse-power of 5,360. Most of them are small single hullers driven by oil engines and owing to the excessive multiplication of such installations many had to be closed down and the owners had to face heavy losses. Conditions have temporarily improved by the demand in Ceylon for Tanjore rice owing to the lack of freight between Rangoon and Colombo and some of these mills were reopened but if the industry is to prosper in future the numerous small concerns which now exist must give place to central factories operating on a comparatively large scale for the export of rice from the district. In the Kistna district the development of the industry has proceeded on altogether different lines and a considerable number of large scale steam driven mills have been installed. But their construction and equipment leave a great deal to be desired. The industry was passing through a time of difficulty and anxiety consequent on the shortage of rolling stock and the great majority of the mills, which in normal times produced boiled rice for export to the Malabar Coast, Coimbatore, Colombo and Mauritius and raw rice for export to the Bombay Presidency, were either closed down or were working short-time. There were 36 concerns engaged in tile and brick making which found employment for over 7,000 hands; ten sugar mills which employed over 3,500 hands; and eleven rubber works all in the States of Travancore and Cochin, which employed over 5,000 hands. There were sundry other industries which were small

Jute mills

Leather

Coir

Coffee works

Cotton ginning

Rice mills

Tiles and bricks

Sugar

Rubber

local concerns and fifteen Government and Local Fund factories in which over 6,500 hands were employed. The revival of ship-building, which was consequent on the shortage of coasting steamers, was developing on a considerable scale both on the East and West Coasts of the Presidency and during the year upwards of fifty sailing ships, ranging in size from 30 to 300 tons, are reported to have been launched at or near Calicut and a private order for a motor cargo boat was placed with an enterprising West Coast firm. Shipbuilding

164. Thirty-eight factories were registered during the year 1917 under the Indian Factories Act, 1911. These consisted of 13 rice mills, one weaving factory, two breweries, three sugar works, two printing presses, one binding factory, two saw mills, three tile works, one tannery, nine ginning factories and one engineering works. Six factories were removed from the register at the end of 1916. There was thus a net addition of 32, which increased the number of factories subject to control under the Act from 460 to 492. Of this number 24 were removed at the close of the year, 14 because they were dismantled and machinery removed, seven because they had been closed for more than two years and three because they employed less than fifty persons. There were thus 468 factories on the register at the end of the year. The average number of operatives employed daily was 95,920, an increase of 4,505 over the figure for the previous year. The number of women and children employed was, respectively, 16,214 and 7,274, or an increase of 415 under the former head and a decrease of 121 under the latter. The increase in the number of women was proportionate to the increase in the total number of operatives. The system of certification of children was working satisfactorily. The health of the operatives was generally good and there was great improvement in the sanitation of the factories and surroundings. By-laws were framed with a view to securing better conditions in factories newly constructed or reconstructed in municipal areas. Some of the larger industrial concerns were taking measures to provide house accommodation for factory hands. There was no increase in the average rate of wages of skilled and unskilled labour employed in factories generally in the Presidency during the year 1917 as compared with the wages for 1916. Owing to war conditions some factories stopped work and some others worked intermittently with the result that there was no steady demand for factory labour. Wages of skilled labour in factories were considerably lower than those prevailing outside. Factory owners experienced difficulty in securing sufficient unskilled labour during the agricultural seasons. There were two strikes during the year. Both were of short duration and were for higher wages. There were two fires resulting in loss of property amounting to Rs. 90,000, but there were no casualties. An interval of half an hour was observed in 416 factories and a system of shifts was adopted in 28. There was a slight increase in the number of accidents, from 420 to 422, nine of which were fatal. Factories

165. There were further difficulties and obstacles during the year in the way of the development of industrial enterprise. Tonnage became scarcer and was strictly controlled from home. The shortage of coasting steamers imposed a heavy burden on the railways which were themselves handicapped by a shortage of rolling stock and by heavy military traffic. Most industrial concerns felt serious anxiety in respect to coal and coke and also experienced difficulty in obtaining wagons to move their finished products. Imports of hardware and metals from the United Kingdom almost ceased, local stocks became very depleted and prices went up correspondingly. The outstanding feature of the year was the increasing measure of control which the Government had to take over industry and trade. Coal and coke, railway traffic, the tanning industry, tanstuffs, wool and pig iron all came under some form of such control which is being extended in further directions. Notwithstanding these difficulties there was considerable industrial activity particularly in Madras itself. The weaving mills were all engaged to a greater or less extent on work for the Indian Munitions Board, and the demand The department of industries

for yarn, owing to the shortage of imports from home, kept all the spinning mills fully active. Much useful work was again done during the year by the peripatetic weaving parties in popularizing the fly-shuttle. The tanning of skins was prohibited, owing to the necessity of conserving the supplies of *avaram* bark, but immense quantities of hides were tanned for army requirements. The finished leather industry also was very brisk owing to the urgent need for accoutrements and army equipment generally. Large quantities of metal fittings were also required for the army, and most of the blacksmiths as well as the Engineering shops of Madras were busily engaged in making buckles, shackles, and similar articles for the Madras Arsenal. A new company was established to assist in meeting this demand, and the manufacture of webbing and tape was also organized by a European firm for the purpose of supplying army demands. Tent making was revived on a small scale at the Madras Arsenal, and a private firm was also taking up this industry as a war enterprise. Among other new developments may be mentioned the manufacture of lathes, looms and loom parts and of pruning knives and planters' tools. A new and large tile factory entirely financed by an Indian Syndicate was opened on the West Coast. The Government pencil factory was so successful that it has been decided to hand it over to private enterprise.

SEA-BORNE TRADE (1917–18)

[*Review of the Sea-Borne Trade of the Madras Presidency for the year 1917–18; Annual Volume of the Sea-Borne Trade and Navigation of the Madras Presidency; Statistics of British India, Part II, Commercial; Annual Statement of the Sea-Borne Trade with the British Empire and Foreign Countries; Annual Statement of the Coasting Trade and Navigation of British India; Review of the Trade of India for 1917–18*]

General

166. The total value of the sea-borne trade of the Presidency, which was Rs. 4,833 lakhs, showed a decrease of Rs. 504 lakhs, or 9 per cent, as compared with that of the preceding year. Government transactions amounted to Rs. 598 lakhs, or Rs. 309 lakhs more than in 1916–17, the increase being due to purchases of tanned hides for the War Office at Home. The effect of the war on all foreign trade continued to be felt severely, and the difficulties in obtaining railway transport and steamer tonnage were accentuated. The restrictions imposed on a variety of imports and exports on account of military and political considerations continued and, with exchange difficulties, helped to hinder trade. The volume of trade actually declined to a much larger extent than that indicated in the above figures because the values of most of the commodities imported and exported were considerably higher than in the previous year. Including Government transactions, foreign trade declined from Rs. 4,153 lakhs to Rs. 3,473 lakhs, or by 16 per cent; while coasting trade improved from Rs. 1,183 lakhs to Rs. 1,359 lakhs, or by 15 per cent. Excluding Government transactions, foreign trade declined by 25 per cent, while coasting trade improved by 13 per cent. Under foreign trade, imports of private merchandise receded from Rs. 1,285·59 lakhs to Rs. 1,220·11 lakhs, or by 5 per cent, due to smaller receipts of metals, railway materials, motor vehicles, machinery and millwork, mineral oils, gold and silver thread, paper and pasteboard, provisions, soap, hardware and instruments, while there were increased values under copra, sugar, cotton twist and yarn, cotton manufactures, postal articles, matches and living animals. Exports declined from Rs. 2,591·27 lakhs to Rs. 1,694 lakhs, or by 35 per cent. If the figures for tanned hides and skins shipped under Government control are added, the shortage would be reduced to 24 per cent. The decrease occurred mainly under leather, seeds, indigo, raw cotton, coffee, spices, senna leaves, grain and pulse, coir manufactures, tea, raw jute, sugar, wood and timber, raw skins, palmyra fibre and cotton twist and yarn, but there were slight

increases under oils, rubber and cotton manufactures. Under coasting trade imports of private merchandise improved slightly from Rs. 612·75 lakhs to Rs. 613·99 lakhs, larger imports of raw and tanned hides, cotton twist and yarn and kerosene oil having been counterbalanced by smaller imports of grain and pulse and teakwood. Exports rose from Rs. 558·43 lakhs to Rs. 706·80 lakhs, or by 27 per cent, the result of larger shipments of raw cotton, groundnuts, coffee and spices. The excess of exports over imports was Rs. 796 lakhs as against Rs. 1,476 lakhs in the previous year. Balance of trade

167. The total gross customs revenue was Rs. 105·94 lakhs, an increase over the previous year of Rs. 4·25 lakhs, or 4 per cent. The amount of import duty realized improved from Rs. 87·50 lakhs to Rs. 94·98 lakhs, or by 8 per cent, partly as a result of enhanced rates of duty on cotton piece-goods leviable under the revised tariff of March 1917, whereby the duty was raised from 3½ to 7½ per cent *ad valorem*, and partly as a result of the high prices of articles which increased the *ad valorem* duties. Larger payments of duty were made on cotton manufactures (+ Rs. 11·27 lakhs), articles of food and drink (+ Rs. 5·45 lakhs), sugar (+Rs. 4·25 lakhs) and tobacco (+Rs. 1·65 lakhs), but there were smaller collections under manufactured articles (—Rs. 3·64 lakhs), silver manufactures (—Rs. 1·94 lakhs), spirits and liquors (—Rs. 1·30 lakhs), iron and steel (—Rs. 1·16 lakhs), and cutlery, hardware, etc. (—Rs. 1·02 lakhs). Exports of both tea and rice decreased and consequently less duty was realized, the deficit being Rs. 3·22 lakhs, or 23 per cent. **Customs revenue**

168. The total value of foreign imports under food, drink and tobacco increased from Rs. 184·38 lakhs to Rs. 215·51 lakhs. The total imports of liquors showed a decline of 18 per cent in quantity, but the value rose by 9 per cent. Imports of spirits fell by 30,800 gallons, or 22 per cent, in quantity, but rose by Rs. 1·23 lakhs in value. Imports of whisky increased by 1,734 gallons or 3 per cent, and this is attributed to the desire of importers to hold stocks against anticipated difficulties in getting out supplies from home on account of the shortage of shipping. Imports of other sorts of spirits declined by 19 per cent. Imports of wines fell by 42 per cent, the decline being most marked under port wine. Imports of provisions and oilman's stores declined by Rs. 9·07 lakhs to Rs. 21·51 lakhs. There was a fall in the case of all varieties of stores excepting farinaceous and patent foods which rose from Rs. 9·52 lakhs to Rs. 12·72 lakhs, smaller supplies from the United Kingdom being made up by larger supplies from the Straits Settlements and the United States of America. Imports of spices declined from Rs. 56·69 lakhs to Rs. 53 lakhs. Betelnuts, which as usual formed the bulk of the imports, fell away slightly. Imports of pepper declined from Rs. 2·81 lakhs to Rs. 1·86 lakhs. Imports of sugar were practically confined to refined sugar which showed an increase of 162 per cent in quantity and 143 per cent in value. The sugar market in the United Kingdom continued to be under the control of the Royal Sugar Commission and prices did not show much fluctuation. In spite of the large demand for cane sugar in England, Java was unable to meet it for want of tonnage. With a shorter lead (a voyage of about three weeks compared with nearly as many months from the East via the Cape) sugar from Cuba filled the gap. The crop in Java was plentiful and hence larger quantities of Java sugar were available for India where they fetched favourable prices. Direct imports from Java declined by 39 per cent in quantity, but imports via the Straits Settlements increased sevenfold. This increase is probably largely accounted for by part of Bombay's requirements being imported through Madras. There were no imports of sugar from Mauritius. There was a decrease in the case of unrefined sugar and molasses which was due to abnormal imports in the previous year and to improved outturns of local jaggery. The total imports of tobacco again showed a considerable increase amounting to 65 per cent in quantity and 71 per cent in value. Imports of unmanufactured tobacco amounted to more than twice as much as in the previous year, and its value increased correspondingly. In previous years the **Foreign imports**

FOOD, DRINK AND TOBACCO

Liquors

Provisions and oilman's stores

Spices

Sugar

Tobacco

United Kingdom and Holland have supplied most of our tobacco, but it appears that purchases have now been made direct from the countries where the tobacco is grown. Imports from the United Kingdom and Holland therefore declined from 36,594 lb. and 31,705 lb. to 19,486 lb. and 20,860 lb. respectively, whereas imports direct from Sumatra and Java, which were formerly negligible, amounted to 29,325 lb. and 10,400 lb. respectively. The United States of America also sent increased quantities. Imports of cigarettes rose by 44 per cent in quantity. The United Kingdom supplied 192,581 lb. against 133,044 lb. The total value of raw materials and unmanufactured articles increased from Rs. 82·05 lakhs to Rs. 106·63 lakhs. The quantity of mineral oils showed a fall of 43 per cent and the value 32 per cent. There was a fall of 59 per cent in quantity and 50 per cent in value in the imports of foreign kerosene oil, which represented 51 per cent of the total quantity of foreign mineral oils imported. The whole quantity imported was supplied by the United States of America but want of 'tankers', many of which have been commandeered for war purposes, limited the supplies. Bulk oil declined by 70 per cent and case oil by 17 per cent. Imports of Burma oil slightly improved from 19 million gallons to 19·6 million gallons. About 2·4 million gallons of liquid fuel were imported, a decline of 14 per cent. Imports of foreign lubricating oils amounted to 711,306 gallons, a rise of 5 per cent, while those from Burma increased considerably from 178,680 gallons to 714,032 gallons. For the first time during the last four years a consignment of 224,990 gallons of foreign petrol was imported from Sumatra. Imports of Burma petrol amounted to 815,552 gallons against 1,337,206 gallons in the previous year. The total value of imports of seeds was Rs. 42·6 lakhs compared with Rs. 0·92 lakh in 1916–17. Copra, or coconut kernel, valued at Rs. 41·9 lakhs, from Ceylon formed the chief item under this head. Owing to insufficient freight during 1916–17 the trade in the products of the coconut palm in Ceylon was very dull and the values for these products fell so low that there was partial stagnation in the coconut industry. There was an accumulation of stocks of copra at the beginning of 1917–18 which found an outlet to this Presidency where there was a demand for crushing purposes. The imports of raw silk from China showed a further improvement and were valued at Rs. 8·28 lakhs against Rs. 4·81 lakhs in 1916–17. Imports of teakwood from Siam declined from Rs. 1·67 lakhs to Rs. 1·44 lakhs, while the value of other timber from that country rose from Rs. 0·22 lakh to Rs. 1·23 lakhs. Palmyra rafters from Ceylon again declined. The total value of imports of manufactured articles declined from Rs. 981·99 lakhs to Rs. 842·08 lakhs. The fall of 47 per cent in the total value under this heading was chiefly due to further shortages of gold and silver thread and lametta from France which decreased from Rs. 31·77 lakhs to Rs. 14·15 lakhs. Imports of boots and shoes have been gradually declining since the war broke out and their value fell during the year below Rs. 1 lakh. Motor vehicles and accessories declined considerably from Rs. 30·49 lakhs to Rs. 5·54 lakhs. The prohibition imposed on the import of motor-cars and motor-cycles in December 1916 only came into full force during the course of 1917–18. Sixty-four cars and 64 motor-cycles were imported compared with 560 and 360 respectively in the previous year. Imports of cycles and accessories rose from Rs. 3·41 lakhs to Rs. 5·03 lakhs. Most of the consignments came from the United Kingdom. The value of chemicals imported (other than chemical manures) showed a slight increase. Imports of soda compounds increased by over Rs. 3 lakhs while other chemicals declined. Drugs and medicines declined from Rs. 11·37 lakhs to Rs. 8·61 lakhs. Imports of camphor declined by 42 per cent in quantity and 19 per cent in value, as smaller quantities were received from Japan. The average value rose from Rs. 1–5–0 to Rs. 1–13–0 per pound. Clocks and watches declined from Rs. 2·57 lakhs to Rs. 0·67 lakh and cutlery from Rs. 1·1 lakhs to Rs. 0·74 lakh. Imports of hardware amounted to Rs. 19·61 lakhs, a fall of 27 per cent. Forty-seven per cent of the total imports came from the United Kingdom, 26 per cent from the

RAW MATERIALS AND PRODUCE AND ARTICLES MAINLY UNMANUFACTURED

Oils

Seeds

Textile materials

Wood and timber

MANUFACTURES

Apparel

Cycles and motor-cars

Chemicals, drugs and medicines

Cutlery, hardware, implements and instruments

United States and 8 per cent from Japan. Instruments and apparatus showed a decline from Rs. 14·06 lakhs to Rs. 9·8 lakhs owing to smaller imports of electrical appliances. Imports of dyeing and tanning substances fell far below the days when Germany manufactured the world's supplies of dyes. There was a further increase in the prices of both alizarine and aniline, the imports of which came from the United Kingdom or from the United States. The average price of the former, which before the war was 8 annas per lb., rose to Rs. 6 in 1916–17 and to Rs. 9 in 1917–18. The price of aniline was Rs. 6–8–0 per lb. as compared with Rs. 4–8–0 in 1916–17 and 12 annas in the pre-war period. There were no imports of synthetic indigo. Imports of paints and painters' materials declined from Rs. 7·07 lakhs to Rs. 4·12 lakhs. Just as Germany formerly supplied all the dyes, so Austria supplied practically all our glassware, the value of which amounted to Rs. 20·63 lakhs in 1913–14, Rs. 8·25 lakhs in 1916–17 and Rs. 4·47 lakhs in 1917–18. In the year under review the United Kingdom's share amounted to 53 per cent and Japan's share to 26 per cent. The decrease was most marked under sheet and plate glass. The value of the imports of machinery declined by 39 per cent. There was a decrease all round but especially under electrical and mining machinery and prime-movers. The United Kingdom supplied 73 per cent and the United States 21 per cent. The Government control over the iron and steel industry in the United Kingdom was closer than in previous years and practically the whole of the production was required for war purposes. The output of private commercial work was insignificant and the tonnage for bringing any available supplies was also scarce. Consequently there was a further decline of 55 per cent in the quantity of iron and steel imported. The average value per ton rose from Rs. 310 to Rs. 390, compared with Rs. 140 in normal times. The United Kingdom supplied 62 per cent against 80 per cent in the previous year, the United States 18 per cent and Ceylon 13 per cent. Imports of bar iron declined by 40 per cent. The decrease was more than made up by larger arrivals of bar iron of Pondicherry manufacture which rose from 5,015 tons to 6,063 tons. Tin is chiefly imported from the Straits Settlements in the shape of unwrought blocks, ingots and slabs. The quantity imported declined by 35 per cent. Imports of lead fell by 34 per cent, but sheets for tea chests showed some improvement. Imports of copper declined by 71 per cent. The demand for copper in the United Kingdom for munition work was greater than ever and very little was left for private exports. Imports of yellow metal sheets which at first dwindled down considerably ceased altogether in September 1917. There was also a considerable shortage of braziers and sheets. There was a decrease of 25 per cent in the value of imports of paper and pasteboard. Of the total imports, the United Kingdom's share was 39 per cent against 71 per cent in the previous year and that of Norway and Sweden 29 per cent against 16 per cent. The shares of Japan, China and the United States were 18, 5 and 4 per cent respectively against 4, 0 and 7 per cent in 1916–17. The total imports of railway plant further declined by 75 per cent. Carriages and wagons declined from Rs. 18·71 lakhs to Rs. 4·46 lakhs, locomotive engines and tenders from Rs. 4·03 lakhs to Rs. 3·6 lakhs and materials for construction from Rs. 12·82 lakhs to Rs. 0·67 lakh. The value of imports of yarns and textile fabrics improved from Rs. 454·42 lakhs to Rs. 488·27 lakhs. The total value of imports of cotton goods, representing 37 per cent of the total foreign imports, increased by 8 per cent. The chief feature of the year was that values of all descriptions of cotton goods steadily rose. There was a 40 per cent increase in cost per piece on goods actually imported during the first ten months of the official year and this increase was even greater from September 1917 onwards but very few of these goods had arrived by the end of the year under review. All classes of goods have been consequently affected by this increase in price while quantities have been greatly reduced. Imports of cotton twist and yarn declined by 33 per cent in quantity but rose by 15 per cent in value. Mule yarn declined by 60

Dyes and colours

Glassware and earthenware

Machinery

Iron and steel

Other metals

Paper and stationery

Railway plant and rolling stock

Yarns and textile fabrics

Cotton goods

per cent in quantity, coloured yarn by 23 per cent and other descriptions by 33 per cent. Both coloured and plain yarns have been in strong demand throughout the year. The total imports of cotton piece-goods further declined by 21 per cent in quantity but increased by 6 per cent in value and the decrease was shared by all goods, viz., grey, white and coloured. Imports of coloured goods declined by 11 per cent in quantity but rose by 8 per cent in value. Imports of grey goods declined by 42 per cent in quantity and 14 per cent in value. The trade in cotton piece-goods was almost entirely confined to the United Kingdom, only 0·4 per cent coming from other sources. The decrease under other cotton fabrics was due to smaller receipts of hosiery from the United Kingdom and Japan and sewing thread from the United Kingdom.

Other minor items

Imports of arms, ammunition and military stores fell from Rs. 10·85 lakhs to Rs. 9·19 lakhs. Imports of cement, mainly for the Madras Harbour works, improved from Rs. 8·58 lakhs to Rs. 11·56 lakhs. Almost all of it came from the United Kingdom. Imports of safety matches rose in value from Rs. 3·94 lakhs to Rs. 14·27 lakhs and other matches from Rs. 1·42 lakhs to Rs. 1·62 lakhs. Japan sent matches to the value of Rs. 12·12 lakhs. There were increased imports of rubber manufactures from Rs. 7·99 lakhs to Rs. 9·47 lakhs in consequence of larger imports of motor tyres from the United Kingdom and the United States of America. The total value of imports of miscellaneous and unclassified articles rose from Rs. 37·17 lakhs to Rs. 56 lakhs. The value of articles imported by post amounted to Rs. 40·21 lakhs against Rs. 26·13 lakhs in the previous year.

Foreign exports

169. The total value of exports of food, drink and tobacco declined from Rs. 754·7 lakhs to Rs. 644·33 lakhs. The exports of grain and pulse declined by 10 per cent in quantity and 7 per cent in value. Exports of paddy decreased by 52 per cent both in quantity and value, and exports of rice by 6 per cent. Shipments of rice and paddy to Ceylon represented 94 per cent of the total exports under this head and receded by 6 per cent both in quantity and value. The decrease was due to curtailment of steamer services. The average value of rice per hundredweight was almost the same as in the previous year, viz., Rs. 8-8-0. Exports of spices declined by 28 per cent in volume and 38 per cent in value. There was a fall of 58 per cent in the quantity and value of pepper exported. The crop was an average one but tonnage was scarce and shipments to the United States, France and Italy declined, but the United Kingdom almost maintained her demand. There was a decline of 72 per cent in quantity and 64 per cent in value of exports of sugar which consisted mainly of unrefined sugar. The total area under sugarcane cultivation increased by 8 per cent due to favourable seasons and to the high price of jaggery at the time of planting. There were no shipments to the United Kingdom. Exports of tea from South India were confined to black tea and amounted to 23·07 million lb. valued at Rs. 157·18 lakhs against 24·91 million lb. valued at Rs. 175·85 lakhs in 1916–17, a decrease of 7 per cent in quantity and 11 per cent in value. The decrease was mainly due to the restrictions placed on exports to the United Kingdom in March 1917 on account of the scarcity of tonnage. Owing to unfavourable showers at the time of blossoming the season's crop was only about two-thirds of that of the previous season. In consequence of the prohibition of import into the United Kingdom and scarcity of tonnage to other destinations exports declined by 35 per cent in quantity and 42 per cent in value. Only 26 per cent went to the United Kingdom compared with 48 per cent in 1916–17 because shipments ceased in July 1917. France's share, however, was 31 per cent against 26 per cent in 1916–17. Exports of tobacco fell by Rs. 1·86 lakhs to Rs. 7·65 lakhs. The trade in leaf tobacco amounted to Rs. 5·86 lakhs. Shipments of cigars further declined from Rs. 3·11 lakhs to Rs. 1·36 lakhs. The total value of exports of raw materials decreased from Rs. 784·18 lakhs to Rs. 634·52 lakhs. Exports of raw hides from the Madras Presidency are comparatively unimportant. Exports of raw skins, 85 per cent of which were goat skins, weighed 1,430 tons valued at Rs. 38 lakhs and declined by 4 per cent in quantity and 17 per cent in value. Owing

FOOD, DRINK AND TOBACCO

Grain, pulse and flour

Spices

Sugar

Tea

Coffee

Tobacco

RAW MATERIALS

Hides and skins, raw

to restricted freight and scarcity of labour in the United Kingdom shipments to that country declined by 76 per cent in quantity and exports to France ceased altogether. Exports to Australia were about four times greater than those to any other country. As exports of all finished leather from the United Kingdom have been prohibited, Australia has turned to India for her raw skins from which she is now producing *glacé* kid and other leathers. Exports to Japan also increased considerably. The export of oils increased from Rs. 77·82 lakhs to Rs. 83·70 lakhs in value. Exports of coconut oil, representing 60 per cent of the quantity of all oils, amounted to 2·49 million gallons valued at Rs. 46·4 lakhs against 2·02 million gallons valued at Rs. 42·53 lakhs. There were large demands for this oil in the United Kingdom both for munition purposes for the manufacture of glycerine and for food for the manufacture of margarine. Exports of castor oil dropped to just below one million gallons but the value rose by just over one lakh to Rs. 15·47 lakhs. The decrease in quantity of oil exported was more than made up by the increased export of castor seeds. Almost all the oil was consumed by the United Kingdom. Shipments of groundnut oil further increased and the increase was particularly marked in the case of consignments to the United Kingdom for use in the margarine industry. During the last two years there has been a considerable falling away in the exports of seeds amounting to 44 per cent in quantity in 1916–17 and a further 10 per cent in 1917–18. The decline in value was 25 per cent and 35 per cent, respectively, but in both these years exports of seeds accounted for 8⅓ per cent of the total value of foreign exports. Groundnuts represented 71 per cent of the total exports of seeds. The average shipments before the war were three times greater, both in quantity and value. The figures for 1917–18 were less by 5 per cent in quantity and 24 per cent in value than those of 1916–17. Shipments to France declined by 89 per cent while those to the United Kingdom increased sevenfold. During 1916–17 very large shipments were made to Marseilles, where prices were considerably in advance of home prices and consequently very little was shipped to the United Kingdom. During 1917–18, however, there was practically no freight space offering for Marseilles, and during the first half of the year the United Kingdom became the only open market and hence any available space was filled up with kernels. Exports to the United Kingdom, however, ceased in October 1917. As the usual groundnut markets were practically closed to shippers, fresh outlets had to be sought for and shipments to the Straits Settlements were sixteen times greater than in 1916–17, the main supply now coming from Madras instead of from the Netherlands Indies. The opening of a factory at Singapore for extracting groundnut oil has increased the demand. The groundnut crop in China failed, and American buyers in Singapore purchased seeds sent from India. Considerable quantities of groundnuts were also reshipped from the Straits to Hongkong. The total quantity shipped at Madras was 100,446 tons compared with 56,819 tons in 1916–17, an increase of 77 per cent. There was a decrease of 75 per cent in exports from Pondicherry. Exports of castor seeds increased from 2,501 tons to 14,316 tons in quantity and from Rs. 3·66 lakhs to Rs. 26·52 lakhs in value. This enormous increase was due to the demand in England for war purposes, large quantities being supplied to the Air Board. To meet this demand groundnuts were removed from the list of essential cargo during the latter half of the year and thereby released large quantities of tonnage for castor seeds. Exports of copra or coconut kernel declined by 78 per cent in quantity and 80 per cent in value, and the decrease is attributed mainly to the scarcity of tonnage. Shipments to France decreased by 91 per cent and those to the United Kingdom by 19 per cent, the fall in the latter case having been made up by larger shipments of coconut oil. There were no shipments to the United States as export to that country was prohibited. The total value of exports of textile materials declined from Rs. 268·12 lakhs to Rs. 204·57 lakhs. Exports of raw cotton showed a decline of 42 per cent in volume and 17 per cent in value. The decrease is attributed chiefly to want of tonnage. Shipments to all countries except the United Kingdom,

Oils.

Seeds

Groundnuts

Castor seed

Copra or coconut kernel

Textile materials

Ceylon and Switzerland declined. The increase in the case of exports to the United Kingdom is attributed to continuous abnormal rise in the price of American cotton which induced buyers at home to go in for cheap Indian cotton to a greater extent than before. The decrease was most marked in the case of Japan and Italy where, owing to want of direct freight to these countries, there was a fall of 33 and 77 per cent, respectively ; nevertheless Japan as usual received by far the largest quantity—roughly three-fourths of the whole. Exports of raw rubber have been advancing steadily in recent years, as larger areas of rubber came into bearing. Exports improved by 11 per cent in quantity and 5 per cent in value. The total value of exports of manufactured articles declined from Rs. 963 lakhs to Rs. 328·28 lakhs. Exports of dyeing and tanning substances further declined from Rs. 73·84 lakhs to Rs. 15·13 lakhs. Exports of indigo declined by 72 per cent in quantity and 83 per cent in value. Both the prices and demand at home were very poor and there was no inducement to ship. Shipments to the United Kingdom and the United States declined from Rs. 41·86 lakhs and Rs. 6·02 lakhs to Rs. 4·36 lakhs and Rs. 0·26 lakh, respectively. There were no shipments to Egypt and Italy. On the other hand shipments to Japan improved from Rs. 1·08 lakhs to Rs. 6·05 lakhs. The total exports of tanned hides and skins on private account decreased by 95 per cent in quantity and 90 per cent in value, while those on Government account increased by 131 per cent in quantity and 134 per cent in value. Exports of tanned hides on private account amounted to 3,186 cwt. valued at Rs. 3·63 lakhs against 142,954 cwt. valued at Rs. 185·07 lakhs. The decline was due to the purchase of hides by Government for war purposes. Shipments of hides made by Government to the United Kingdom amounted to 297,731 cwt. valued at Rs. 409·40 lakhs. Exports of tanned skins on private account declined by 92 per cent in weight and 85 per cent in value. Export to the United Kingdom declined by 90 per cent and there were no shipments to the United States of America. Exports on Government account, which consisted mainly of calf skins, amounted to 5,958 cwt. valued at Rs. 7·85 lakhs. There were none in 1916–17. The reason for the large decrease in exports of tanned skins is that an order was issued in April 1917 under the Defence of India Act prohibiting tanners from tanning skins, so that tanning stuffs should be conserved for use in tanning Government hides only. The export of tanned skins was absolutely prohibited from 15th May 1917. Exports of cotton twist and yarn further declined by 65 per cent in quantity and 51 per cent in value. Exports of cotton piece-goods declined by 3 per cent in quantity but rose by 6 per cent in value. Under coloured goods the value of lungis and saris declined from Rs. 108·55 lakhs to Rs. 97·02 lakhs, while other sorts rose from Rs. 6·05 lakhs to Rs. 23·40 lakhs. The export trade in Madras handkerchiefs made by handlooms further declined from Rs. 4·19 lakhs to Rs. 1·85 lakhs. Almost the whole went to the United Kingdom. Exports of coir manufactures, consisting chiefly of coir yarn and matting, amounted to Rs. 43·50 lakhs against Rs. 63·54 lakhs in 1916–17. Oil-cakes to the value of Rs. 49·29 lakhs were exported against Rs. 48·92 lakhs in 1916-17. Articles exported by post receded from Rs. 46·86 lakhs to Rs. 43·34 lakhs. The total value of re-exports amounted to Rs. 25·13 lakhs against Rs. 21·69 lakhs in the previous year.

Rubber

MANUFACTURED ARTICLES

Dyes and colours

Hides and skins, tanned or dressed, and leather

Yarns and textile fabrics

Coir manufactures

Oil-cakes

Re-exports

Government transactions

170. The total value of Government stores imported and exported amounted to Rs. 118·54 lakhs and Rs. 440·74 lakhs compared with Rs. 97·12 lakhs and Rs. 179·23 lakhs, respectively, in the previous year. The increase under imports occurred under woollen piece-goods and chemicals. The imports were mostly from the United Kingdom except Rs. 5·12 lakhs' worth of chemicals which came from Japan. The increase under exports was the result of larger shipments of tanned hides, tea, tanned skins and railway plant and rolling-stock. The shipments were mostly to the United Kingdom.

Shipping

171. The total number of vessels that entered and cleared declined from 4,161 to 3,793 and their tonnage from 2·28 million tons to 1·75 million

tons. As compared with the average figures previous to the war (3,343) the total number of vessels actually increased by 13 per cent but their tonnage declined by 56 per cent and consequently the average tonnage per vessel (461) declined. These figures, however, are not of much interest as the average tonnage is affected to a considerable extent by the ferry steamers plying daily between Dhanushkodi and Talaimannar, but if these are excluded the average tonnage of British vessels entering and clearing was 1,567 and that of foreign vessels 2,596. Of the ten vessels which entered under foreign colours there were two each under Dutch, Norwegian, American and Siamese colours and one under Italian and Japanese. British vessels accounted for 88 per cent of the whole tonnage and British Indian vessels and native craft for 7 per cent. The tonnage of foreign vessels declined from 6 to 5 per cent. The number of native craft engaged in foreign trade declined from 1,289 to 1,034 and their tonnage from 88,431 to 61,947.

General effect of the war

172. One of the results of the war naturally has been to increase the British Empire's share of the aggregate trade of the Madras Presidency. This share was 63 per cent before the war, 75 per cent in 1916–17, and 81 per cent in 1917–18. The value of imports declined by 2 per cent and that of exports by 27 per cent; giving a total decline in trade of 18 per cent. The trade with other countries also declined by 44 per cent.

Trade according to countries

173. The trade with the United Kingdom represented 40 per cent of the total trade compared with 48 per cent in 1916–17 and declined by Rs. 696·46 lakhs or 37 per cent. If the tanned hides and skins shipped under Government control are included, the fall in the total trade would be reduced to 22 per cent. The trade with the British Empire representing 81 per cent of the aggregate trade of the Presidency declined by 18 per cent. The trade with the continent of Europe showed a decline of Rs. 271·43 lakhs or 73 per cent and the decline occurred mainly in the trade with France and Italy. Smaller trade with the Philippines, Java and Japan resulted in a decrease of Rs. 22·1 lakhs or 7 per cent in the trade with Asiatic ports. The trade with Africa declined by Rs. 3·05 lakhs owing to cessation of exports to Réunion, and that with America, which was practically confined to the United States, declined by Rs. 135·25 lakhs or 45 per cent.

Coasting trade

174. The total value of coasting trade excluding Government transactions improved by Rs. 149·61 lakhs or 13 per cent. Imports of private merchandise improved slightly by Rs. 1·24 lakhs, larger imports of tanned and raw hides, cotton twist and yarn and kerosene oil having been counterbalanced by smaller imports of grain and pulse and teakwood. Exports rose by Rs. 148·37 lakhs or 27 per cent, the result of larger shipments of raw cotton, groundnuts, coffee and spices.

Ports

175. The relative importance of the trade of the outports remained much the same as in the previous year. Mangalore improved its position from sixth to fifth place at the expense of Calicut. Dhanushkodi was the only port to show an appreciable increase of trade but Mangalore and Cannanore both handled more merchandise than in 1916–17. The value of sea-borne trade on private account at the port of Madras represented nearly 42 per cent of the trade of the whole Presidency compared with 45 per cent in the previous year and 41 per cent in 1915–16.

Miscellaneous

176. The total revenue receipts for the Presidency increased from Rs. 107·86 lakhs to Rs. 115·03 lakhs or by 7 per cent. The total disbursements on account of Customs for the whole Presidency amounted to Rs. 6·65 lakhs compared with Rs. 7·01 lakhs in 1916–17. There were no customs cases of particular importance. The number of offences dealt with under the Sea Customs Act during the year was 936 against 1,494 in the previous year. Penalties realized amounted to Rs. 19,175 against Rs. 27,019 in 1916–17. Five hundred and four cases occurred at Madras and 432 at the outports.

PUBLIC WORKS

GENERAL (1917-18)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1917-18*]

Administrative changes

177. There was no alteration in the permanent strength of either the Engineer or Upper Subordinate establishment. The report of the Public Works Department Reorganization Committee was received during the year, and the orders of the Government of India on the committee's recommendations are awaited. The services of 11 more officers and upper subordinates of the department were placed at the disposal of the Army Department, thus bringing the total number of officers and subordinates who have proceeded on military duty since the beginning of the war to 50. A Tank Restoration Scheme division was reformed in the I Circle and certain subdivisions were enlarged or re-arranged. The Tank Restoration Scheme division of the III Circle was abolished and a new division (the Madanapalle division) was formed. The territorial limits of the Bellary, Cuddapah and Kurnool divisions were curtailed, so as to conform with the limits of the revenue districts, and a few changes of subdivisional charges were also effected. The Tank Restoration Scheme division of the IV Circle was revived at the close of the year, and, in consequence, certain changes in the limits of the VI and VII Circles took place.

Chief Engineer's office

Technical section

178. Seventy-seven estimates of the aggregate value of Rs. 54·14 lakhs were scrutinized during the year. Seventeen of these totalling Rs. 15·48 lakhs related to water-supply, which included revised estimates for Masulipatam (Rs. 6·78 lakhs), and Erode with extension to a village in the Coimbatore district (Rs. 3·45 lakhs). Ten drainage schemes, estimated to cost Rs. 8·50 lakhs in the aggregate, were dealt with, of which an estimate of no less than Rs. 4·50 lakhs related to the opening of sanitary lanes in connexion with the drainage of Kumbakōnam town. Twenty-five estimates totalling Rs. 17·91 lakhs were for roads and bridges, of which mention may be made of a girder bridge (Rs. 2·03 lakhs) across the Devakottah river in the Rāmnād district, the new Hindri river bridge (Rs. 1·78 lakhs) in the Kurnool district and the Amerdi-Nadanur Ghat road (Rs. 1·30 lakhs) in the Javadi hills of the North Vellore Forest division in the North Arcot district. The remaining twenty-five estimates totalling Rs. 12·25 lakhs were for miscellaneous works, the most important of which was the construction of a pier at Tellicherry in the Malabar district. Technical work in connexion with type-designs and the standardization of details was continued and a number of circulars of general interest was issued. Various matters of technical interest were examined such as the use of tar-macadum on causeways across rivers, the use of reinforced concrete in departmental works and the suitability and comparative strength of certain species of wood and timber for building purposes. Four hundred and ten drawings, as against 250 in the previous year, were prepared by the Consulting Architect to Government for various buildings with specifications and schedules of quantities for most of them. The most important of these are the new buildings for the General Hospital and the Engineering College. The former more than occupied all the Consulting Architect's spare time. The original scheme having been rejected by the Government of India it was discussed as a whole and considered again *ab initio* and was growing on radically different lines to those of the previous scheme. Numerous preliminary sketches were made and discussed and the new scheme is expected to be ready for submission before Christmas. Progress as regards the Engineering College was slow on account of the difficulty experienced in procuring materials. Several details were made during the year with a view to simplifying ornamental features which would be considered extravagant in war time. Eight revised type-designs were prepared during the year including designs for flag-staffs and bomb-proof magazines. In addition to this work 133 estimates and designs with an

Consulting Architect's section

aggregate value of Rs. 50·81 lakhs were scrutinized. Twelve of these were for buildings estimated to cost over one lakh of rupees each, of which mention may be made of the new Collector's office, Madura, the General Hospital, Cocanada, the Presidency Training School for Mistresses, Egmore, and the Ramakrishna Students' Home, Mylapore. The Hydro-Electric Scheme from the Siruvani river source for the supply of water and electricity to Coimbatore and Podanur and of electricity to the Nilgiri Hills was proceeded with. The supply of electrical energy by a private company to a portion of Tenali in the Guntūr district was commenced during the year and applications from such companies were under consideration for the supply of energy to Madura, Trichinopoly and Karaikudi in the Rāmnād district. The Bezwada Municipality had under consideration a scheme for the supply of electric light and power to the various mills and residences. The total number of estimates scrutinized by the Electrical Inspector during the year was 56 with an aggregate value of Rs. 1·78 lakhs. The more important of these are installations to the Lunatic Asylum, Kilpauk (Rs. 53,114) which was in progress during the year, and installations at the new Stationery stores, Madras (Rs. 70,554) and the King Institute, Guindy, (Rs. 16,814), both of which were completed. The number of electric installations under Public Works department maintenance throughout the Presidency was 69, all of which were inspected and tested. The capital cost of these installations is Rs. 11·06 lakhs and the amount spent on their maintenance, apart from the actual consumption charges, was Rs. 55,260. Increased attention was bestowed on the voltage of supply of the Madras Electric Supply Corporation. The use of electricity is increasing in popularity; the last five years have witnessed a great advance not only in Madras City but also throughout the mufassal. In 1913, the number of consumers in Madras City was 1,335, with a consumption of 3,519,131 units; in 1917 the numbers were respectively 2,529 and 5,942,881. Street lighting in Madras City showed considerable progress; five years ago, only two small localities in Madras City were lighted with electricity, while there are now 24 miles of street lighting mains with over 2,400 lights. In the mufassal the number of private plants, which was 79 in 1913, rose to 167, the greater portion of the additional plants having been installed in the pre-war period.

Electrical schemes and works

CIVIL WORKS (1917-18)

179. The total expenditure during the year on civil works, including expenditure from contributions, minor works and repairs, was Rs. 46·76 lakhs as against Rs. 61·23 lakhs in the previous year. The construction of the civil hospital at Vizagapatam was started during the year and an outlay of Rs. 0·46 lakh incurred, bringing up the total outlay on the work, including the previous expenditure on "preliminaries", to nearly Rs. 0·60 lakh. Among the more important of the other works which were in progress during the year, mention may be made of the General Hospital at Guntūr, on which an outlay of Rs. 0·42 lakh was incurred, the new Engineering College, Guindy, on which the expenditure amounted to Rs. 3·02 lakhs, the Rāyapuram hospital on which a sum of Rs. 1·34 lakhs was spent, the Technical Institute, Madura, on which the expenditure amounted to nearly Rs. 0·60 lakh and the new District Court buildings at Trichinopoly on which an outlay of Rs. 0·74 lakh was incurred. Fair progress was made on improvements to the customs accommodation at Cochin and the total outlay, inclusive of the year's expenditure, was approaching the estimated cost of the work (Rs. 1·25 lakhs). An expenditure of over Rs. 39,000 was incurred on the Kalingia Ghat Road, bringing up the total outlay on the work to Rs. 1·40 lakhs, against an estimated cost of Rs. 1·86 lakhs. The construction of a girder bridge of seven spans of 50 feet over the Aliyar river at Yakkara was in progress and steel work was erected in four of the spans. The expenditure during the year was Rs. 70,000 and the total outlay was

Works in progress
Buildings

Imperial Civil works
Communications

Rs. 1·03 lakhs against an estimate of Rs. 1·10 lakhs. The construction of a bridge of ten spans of 50 feet with warren girders and a reinforced concrete floor across the Amarāvati at Chinnadhārāpuram estimated to cost Rs. 1·12 lakhs was in progress. The steel work was completed and the total outlay was nearly Rs. 80,000, of which Rs. 26,000 represents the year's expenditure.

Water-supply and drainage

A sum of over Rs. 3¼ lakhs was spent on improvements to the Madura water-works. The outlay on the Masulipatam water-supply scheme amounted to nearly Rs. 98,000 and that on the Ellore scheme to over Rs. 75,000. Work amounting to over Rs. 51,000 was done on the Tuticorin water-supply scheme and an expenditure of over Rs. 45,000 was incurred on the Vellore drainage scheme. Sundry other major works of water-supply and drainage were under execution but the expenditure on each individual work was comparatively small.

Port and Marine works

A small expenditure of Rs. 4,278 was incurred during the year on the pier at Tellicherry, the total outlay being Rs. 1·64 lakhs against an estimate of Rs. 3·42 lakhs. The encasing of the piles with cement concrete was in progress.

Workshops

180. The Dowlaishwaram workshops continued to be under the direct charge of the Executive Engineer, Gōdāvari Headworks division. There was a further slight fall, from Rs. 1·45 lakhs to Rs. 1·41 lakhs, in the value of the work done, the decrease occurring under Port and Marine Funds and Marine Department, mainly dué to the reduction in the work, which was done in the previous year, of repairing steamers and building barges for despatch to Mesopotamia for war service. Among the more important works executed during the year mention may be made of the construction of two barges of 90 feet length to replace those lost at sea while on their way to Mesopotamia. In the Bezwada workshops also, there was a fall from Rs. 1 lakh to Rs. 0·71 lakh, in the value of the work done, which was mainly due to a falling off in the number of important works placed on the shops owing to the curtailment of grants and also to the stoppage of many works on account of the present financial stringency. The value of the outturn of the Presidency Workshops was Rs. 3·03 lakhs as against Rs. 3·25 lakhs in the previous year. The fall was due to the great fall in Public Works department non-provincial works caused by war conditions. Many of the sanctioned works had to be kept in abeyance for want of materials, but special preference was given to munitions work, and the output under this head increased by nearly half a lakh to Rs. 1·03 lakhs. This manufacture involved a larger amount of labour, time and trouble, than an equal output of ordinary work would have necessitated.

RAILWAYS (1917–18)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1917–18; Statistics of British India, Part III—Commercial Services*]

Development

181. There was an addition of 41·50 miles to and a decrease (owing to the dismantlement of the Guntūr-Tenali Railway line) of 15·88 miles in the open mileage in the Presidency during the year. The total mileage of the railway systems was 3,825·20 miles, as against 3,805 miles in the previous year, of which 1,699·65 miles were broad gauge, 2,002·15 miles metre gauge and 123·40 miles narrow gauge. The District Boards of Tanjore, Kistna, Coimbatore, Guntūr and Salem owned 214·14 miles of railway. The total extent of railway systems in the Presidency controlled by the Railway Board and by District Boards subject to the general control of this Government was thus 4,039·34 miles. The Sūramangalam-Salem railway of the Salem District Board, which had been completed in the previous year, was opened for traffic on the 1st June 1917. The Tiruturaippūndi-Vēdāranniyam Railway of the Tanjore District Board, though

completed in December 1916, could not be opened for traffic as the South Indian Railway were unable to provide rolling stock owing to war conditions. The offer of the Madras Provincial Railway Company to work the line on certain terms had to be refused owing to the practical difficulties in the way and to the likelihood of the rolling stock collected by them being required by the Railway Board for more important military purposes. The Quilon-Trivandrum extension (37·91 miles) was completed and opened for traffic on the 1st January 1918. The position as regards the Tinnevelly-Tiruchendūr railway grew worse during the year and all the permanent-way materials were sold to the Munitions Board for war purposes. There is no prospect of work on the line being resumed in the near future. The Guntūr-Tenali line was dismantled as the materials were required to meet pressing military demands and the line was completely closed for traffic from the 21st October 1917. The Railway Board sanctioned a reconnaissance survey being carried out by the agency of the South Indian Railway for a line of railway on the metre gauge from Shōranūr via Nilambur to Manantoddy with branches to Tellicherry and Beypore making a total distance of 230 miles. No other surveys were taken up during the year. The Officer of the Railway Board in charge of the Mysore and West Coast Railway Surveys submitted a report on the Hassan-Mangalore Railway project. Forty-three new District Board and other lines were under consideration up to the end of the year.

Accidents

182. No appreciable decrease occurred in the number of accidents during the year. There were 16 collisions and 11 derailments. One serious accident took place on the South Indian Railway in August. A special train carrying a party of 107 naval ratings with two officers, returning from Colombo to Bombay, on entering Tiruppuvanam station (Madura-Dhanushkodi section) was turned into the loop line where a goods train was already standing, with the result that there was a serious collision. One British seaman was killed and four seriously injured ; the engine crew of the special and two servants of the dining car attached to the train were slightly injured. Extensive damage was caused to the engines and stock of the two trains, the second-class coach of the special telescoping into the front brake-van. The collision was caused by the points, from which the locks had been removed, being set for the loop line, whilst the signals which had been disconnected from and could be worked independently of the points were lowered for the main line. A joint inquiry was held and the persons culpable were suitably dealt with. The stationmaster and the pointsman were prosecuted and convicted, but the conviction of the former was set aside on appeal.

Miscellaneous

183. In September 1917 a revised form of model agreement was forwarded by the Railway Board for the approval of the main line companies and District Boards and this was communicated to the Railway administrations and District Boards. In addition to the reduction of ordinary train service it was found necessary during the year to limit the movement of pilgrims to fairs and festivals. Press communiqués were therefore issued by Government dissuading intending pilgrims from travelling by rail. As the result of a resolution moved by a non-official member in the local Legislative Council in April 1917, a special inquiry was undertaken during the year into the arrangements obtaining at railway stations for the supply of refreshments to Indian passengers.

TRAMWAYS (1917-18)

184. There was no alteration in the route mileage operated upon by the Madras Electric Tramway system in Madras City. There were some changes in the plant at the power station but, as in the previous year, this was used only as a standby and current was obtained from the Madras Electric Supply Corporation, Limited. There was an addition to the rolling-stock of two bogie cars which were constructed by the

Tramway Company during the year. The average daily service was 69 cars, or three more than in the previous year. The car mileage, however, fell, by 16,727 miles, to 1,581,430 miles although the number of passengers carried rose, by 2,363,801, to 22,759,095. The net balance on the year's working showed a slight increase over that of the previous year.

CANALS (1917-18)

185. Navigation was carried on as usual on the Chilka lake canal, the Dummagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vedaranniyam canals. Excluding the West Coast canals, for which figures are not available, the total receipts rose by Rs. 0·22 lakh to Rs. 2·69 lakhs. The increase occurred chiefly under the Kistna and the Buckingham canals as the result of a larger number of boats having taken out licences and the higher revenue realized on wharfage fees owing to the restrictions of railway traffic on account of war conditions. These restrictions also resulted in an increase in the number of passengers and in the ton-mileage and value of goods carried.

IRRIGATION (1917-18)

Gross expenditure and revenue

186. The expenditure incurred on irrigation works rose, by Rs. 7·35 lakhs, to Rs. 78·96 lakhs and the revenue derived therefrom increased, by Rs. 11·98 lakhs, to Rs. 275·26 lakhs. The area charged as irrigated was 7,358,829 acres, or 79,210 acres more than in 1916–17.

Class I, Major works

Protective works

187. As in the previous year there were four works sanctioned under "Major—Protective Works". Of these, the Rushikulya system was in operation, the Venkatapuram project was completed during the year and the other two projects (the Bhavanasi tank project and the Mopad reservoir project) were still under construction. The capital outlay was Rs. 2·66 lakhs (direct and indirect) as against Rs. 2·76 lakhs in the previous year, and the bulk of this expenditure was devoted to projects under construction. The areas irrigated under the Rushikulya system rose, by 3,158 acres, to 105,112 acres under first crop, but under second crop it fell, by 938 acres, to 1,754 acres. The gross revenue including old irrigation revenue rose, by Rs. 0·24 lakh, to Rs. 2·60 lakhs, while working expenses fell from Rs. 0·80 lakh, to Rs. 0·66 lakh. The net revenue deducting interest charges showed a deficit of Rs. 1·08 lakhs against Rs. 1·25 lakhs in the previous year. The capital outlay on productive works (direct and indirect) increased slightly from Rs. 6·35 lakhs to Rs. 6·55 lakhs and, as in the previous year, was mainly incurred on the Gōdāvari and the Kistna delta systems, the Kurnool-Cuddapah canal, the Cauvery delta system and the Toludur project, the last of which continued to be the only work of this class under construction. In the Gōdāvari delta system the works carried out during the year, besides four which were continued from the previous year, were the construction of a lock and regulator on the Kakaraparru canal and the remodelling of the Tossipudi north side channel. In the Kistna delta system, the provision of steel lock gates for the Sitanagaram head lock was completed, and improvements to the Kollipara channel and the Bhattiprole drain and the remodelling of the Donepudi block were in progress. The work of raising and strengthening the right and left flood banks of the Kistna river estimated to cost Rs. 56,400 was almost completed. In the Kurnool-Cuddapah canal, the Ukkayapalli project was completed and the Chepad project continued to be under execution. In the Cauvery delta system the improvements to the Manniyar, and the Kannappamulai calingula across the Kadaliyar were completed and improvements to the Vellapalem Uppanar and to the tail end of Vellappar were in progress. The total area charged as irrigated

Productive works

rose, by 17,350 acres, to 3,002,950 acres under first crop and, by 38,216 acres, to 523,881 acres under second crop. The gross revenue, inclusive of old irrigation revenue, amounted to Rs. 160·67 lakhs, or an excess of Rs. 6·40 lakhs over the previous year's figure and working expenses, including old maintenance charges, rose, by Rs. 3·01 lakhs, to Rs. 34·12 lakhs. The net revenue due to improvements was Rs. 86·80 lakhs against Rs. 83·36 lakhs in the previous year and it represented a return of 9·95 per cent on the capital outlay of Rs. 8·72 crores as against 9·63 per cent in 1916–17. After deducting interest charges the profit for the year was Rs. 58·41 lakhs against Rs. 56·62 lakhs in the previous year and accumulated profits to the end of the year amounted to Rs. 16·76 crores. Compared with the previous year the gross revenue showed an increase of Rs. 6·40 lakhs which occurred chiefly under the Gōdāvari, the Kistna, and the Cauvery delta systems. There was an increase of Rs. 3·01 lakhs under "Working expenses", the bulk of which occurred under the Kurnool-Cuddapah canal in consequence of damage caused by floods to the canal and to the anicut across the Penner at Adinimayapalli. The remissions granted under "Protective" and "Productive" works fell, by Rs. 3,171 and Rs. 43,989, to Rs. 1,215 and Rs. 1,92,580, respectively. As in the previous year they were mostly granted in the Gōdāvari and the Kistna delta systems.

Revenue

Expenditure under revenue account

Remissions

188. The capital outlay (direct and indirect) on Minor Works and Navigation was Rs. 1·61 lakhs, which was chiefly incurred as in the previous year on three projects in the Kurnool, Trichinopoly and Coimbatore districts. The area charged as irrigated rose, by 2,835 acres, to 272,059 acres under first crop and, by 11,000 acres, to 98,437 acres under second crop. The gross revenue, including old irrigation revenue, rose, by Rs. 1·03 lakhs, to Rs. 15·17 lakhs and working expenses, by Rs. 0·54 lakh, to Rs. 4·43 lakhs and the net revenue due to improvements increased by Rs. 0·49 lakh. There was a further small decrease, from Rs. 6,956 to Rs. 6,141, under remissions, which, as in the previous year, occurred principally under the Ganjām minor rivers system and the Pālār anicut system.

Class II, Minor works and navigation

189. The outlay on class III works, including that incurred by civil officers and accounted for by the civil department, was Rs. 28·49 lakhs, as against Rs. 24·35 lakhs in the previous year. The area charged as irrigated rose, by 7,589 acres, to 3,354,636 acres, and the revenue derived, inclusive of the amount collected in the Public Works department, was Rs. 95·77 lakhs as against Rs. 91·57 lakhs in the previous year. A sum of Rs. 3·25 lakhs was remitted as against Rs. 4·99 lakhs in the previous year. An area of about 103,750 square miles under all works in the Presidency had to be investigated under the Tank Restoration Scheme. An area of 83,157 square miles of minor basins had been entered upon by the beginning of the year, of which 77,055 square miles had been investigated. During the year an area of 455 square miles were entered upon and 654 square miles were investigated. Works were executed for 69,993 square miles in the area completely investigated, were in progress for 4,069 square miles and were not commenced in the balance of 3,647 square miles. Estimates amounting to Rs. 3,07,324, or Rs. 8,769 more than in the previous year, were sanctioned for Government works, the amount sanctioned under this head from the beginning of the operations up to the end of the year being Rs. 140·74 lakhs. The expenditure during the year was Rs. 3·40 lakhs or Rs. 4·18 lakhs including percentage charges.

Class III works

Tank Restoration Scheme

190. The outlay incurred on agricultural works increased from Rs. 6·56 lakhs to Rs. 6·70 lakhs and the revenue realized rose, by Rs. 11,660, to Rs. 1·05 lakhs.

Class IV, Agricultural works

191. The orders of the Secretary of State on the estimate for the Cauvery reservoir project were not received during the year. The Uttiramerur tank project in the Chingleput district was abandoned and final orders were not passed on the four projects which were under

Investigation of projects

Small projects

consideration in the previous year. Plans and estimates for improvements to the Girisola channel in the Ganjām district were still under preparation and the investigation in connexion with the improvements to the Korathala Tampara was completed and the preparation of plans and estimates was taken up. Investigation in connexion with the improvements to the Jayamangalam channel was still in progress. The revenue aspects of the Vamsadhara project were under examination by the local officers. In the Gōdāvari district the estimate for the extension of irrigation to the Coringa and Polavaram islands were revised by the Superintending Engineer. In the Guntūr district the detailed investigation connected with the Pratur pumping scheme was completed, and plans and estimates were under preparation. Plans and estimates completed in the previous year, for resluicing the Amarāvati channels in the Coimbatore district, were under consideration. The report of the Board of Revenue on the revenue forecast of the Amarāvati project was under the consideration of Government. In connexion with the Meengarai and the Malapuzha projects in the Malabar district, gauge readings were taken to ascertain the quantity of water available. The estimate prepared for works designed to render the Nilambūr river suitable for the transport of forest produce was under consideration. In connexion with the Chidambaram drainage scheme detailed plans and estimates for improvements to the Veeranam tank were submitted to the Chief Engineer for Irrigation, who had under his consideration also the plans and estimates for works necessary to prevent damage by floods caused by the spill of the Vellar above the Shatiatope regulator. Detailed plans and estimates for improvements to the Vadavar were under preparation. An estimate amounting to Rs. 1·85 lakhs for improvements to the Ponnēri channel was sanctioned. The Ladapuram project was abandoned.

Miscellaneous

192. No exceptional floods occurred during the year nor were there any serious breaches or accidents.

Ayacut maps

193. The ayacut maps of the Gōdāvari delta were printed and those for the Kistna delta were still under revision. The maps of the Kurnool-Cuddapah canal were mostly completed. Block maps of the Cauvery delta were completed and printed.

CHAPTER V

REVENUE AND FINANCE (1917–18)

[*Statistics of British India, Part IV (a) and (b)—Finance and Revenue*]

REVENUE AND FINANCE OTHER THAN MUNICIPAL

(*a*) GROSS REVENUE

Revenue and expenditure

194. The following statements give the figures during each of the past two years of the Imperial and Provincial revenue and expenditure as well as the Capital expenditure on State Railways and Irrigation Works not charged to Revenue.

Imperial and Provincial Funds—Receipts

Principal heads of revenue	Imperial		Provincial		Total	
	1916-17	1917-18	1916-17	1917-18	1916-17	1917-18
	RS.	RS.	RS.	RS.	RS.	RS
I. Land Revenue	3,50,08,342	3,51,57,579	3,50,08,342	3,51,57,579	7,00,16,684	7,03,15,158
II. Opium	4,90,681	5,23,025	...	...	4,90,681	5,23,025
III. Salt	1,28,65,839	1,62,01,081	...	...	1,28,65,839	1,62,01,081
IV. Stamps	77,94,639	77,11,598	77,94,638	77,11,599	1,55,89,277	1,54,23,197
V. Excise	1,86,01,304	2,01,76,050	1,86,01,304	2,01,76,050	3,72,02,608	4,03,52,100
VII. Customs	1,07,85,575	1,15,02,941	...	...	1,07,85,575	1,15,02,941
VIII. Income-tax	30,04,572	43,06,642	30,04,572	38,32,870	60,09,144	81,39,512
IX. Forest	...	...	45,96,126	54,66,463	45,96,126	54,66,463
X. Registration	...	...	24,70,160	24,72,459	24,70,160	24,72,459
XI. Tributes from Native States.	44,96,519	44,96,519	...	...	44,96,519	44,96,519
XII. Interest	7,15,110	7,20,760	4,82,547	4,56,477	11,97,657	11,86,237
Receipts by Civil Departments						
XVI-A. Law and Justice—						
A. Courts of Law	...	...	11,38,856	11,33,641	11,38,856	11,33,641
B. Jails	...	...	5,69,398	7,69,942	5,69,398	7,69,942
XVII. Police	...	...	5,19,980	5,40,125	5,19,980	5,40,125
XVIII. Ports and Pilotage	...	...	1,313	410	1,313	410
XIX. Education	...	...	3,54,148	3,54,894	3,54,148	3,54,894
XX-A. Medical	...	...	1,42,059	1,57,224	1,42,059	1,57,224
XX-B. Sanitation	...	...	17,485	15,525	17,485	15,525
XXI-A. Agriculture	...	...	1,98,249	1,88,771	1,98,249	1,88,771
XXI-B. Scientific and Miscellaneous Departments.	...	...	13,85,311	18,69,459	13,85,311	18,69,459
Miscellaneous						
XXII. Receipts in aid of Superannuation.	1,23,819	1,22,625	1,26,995	1,25,989	2,55,814	2,48,614
XXIII. Stationery and Printing ...	18,282	14,399	1,23,057	1,65,989	1,41,339	1,80,388
XXV. Miscellaneous	69,367	86,709 * 12,84,124	3,43,096	2,02,380	4,12,463	2,89,089 12,84,124
XXVI. State Railways (gross receipts).	8,48,04,224	9,33,65,391	...	...	8,48,04,224	9,33,65,391
State Railways (District working expenses).	4,86,06,744	4,94,84,106	...	...	4,86,06,744	4,94,84,106
Net Receipts	3,61,97,480	4,38,81,285	...	...	3,61,97,480	4,38,81,285
XXVIII. Subsidized Companies—Repayment of advance of interest.	2,46,536	1,95,391	...	...	2,46,536	1,95,391
Revenue from Productive Public Works						
XXIX. Irrigation—Major Works—						
Direct Receipts	1,55,769	1,59,537	1,55 768	1,59,537	3,11,537	3,19,074
XXX. Minor Works and Navigation in charge of—						
Civil Officers	...	...	26,111	24,491	26,111	24,491
Public Works Officers ...	...	...	2,53,379	2,92,379	2,53,379	2,92,379
XXXI. Civil Works in charge of—						
Civil Officers	...	...	1,10,477	42,156	1,10,477	42,156
Public Works Officers ...	3,764	12,877	4,02,533	4,41,246	4,06,297	4,54,123
Total ...	13,05,82,598	14,65,62,142	7,78,25,904	8,17,57,655	20,84,08,502	22,83,19,797
Transfers between Imperial and Provincial Revenues.	— 16,52,784	— 16,74,540	+ 16,52,784	+ 16,74,540	...	...
Grand Total ...	12,89,29,814	14,48,87,602	7,94,78,688	8,34,32,195	20,84,08,502	22,83,19,797

* Freight tax.

Imperial and Provincial Funds—Charges

Heads of account	Imperial		Provincial		Total	
	1916-17	1917-18	1916-17	1917-18	1916-17	1917-18
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.
1. Refunds and drawbacks	5,05,808	4,97,756	2,63,775	2,71,312	7,74,583	7,69,068
2. Assignments and compensations	10,05,467	10,04,432	2,97,710	2,79,457	13,03,177	12,83,939
3. Land Revenue	...	...	1,22,76,233	1,24,74,408	1,22,76,233	1,24,74,408
5. Salt	17,86,343	18,15,934	...	...	17,86,343	18,15,934
6. Stamps	2,23,190	2,43,802	2,23,190	2,43,803	4,46,380	4,87,605
7. Excise	9,08,026	9,17,504	9,08,025	9,17,503	18,16,051	18,35,007
9. Customs	4,30,734	4,34,352	...	...	4,30,734	4,34,352
10. Income-tax	33,080	34,146	33,079	34,147	66,159	68,293
11. Forest	...	...	28,42,678	30,20,349	28,42,678	30,20,349
12. Registration	...	...	13,12,239	13,39,697	13,12,239	13,39,697
13. Interest	...	...	3,23,432	3,49,901	3,23,432	3,49,901
14. Interest on other obligations	2,22,248	2,51,217	...	...	2,22,248	2,51,217
18. General administration	5,33,420	5,84,630	15,15,419	15,83,799	20,48,839	21,68,479
19. Law and Justice—						
A. Courts of Law	...	...	85,47,219	85,12,374	85,47,219	85,12,874
B. Jails	...	...	15,63,193	16,68,202	15,63,198	16,68,202
20. Police	...	...	1,14,74,811	1,16,91,100	1,14,74,811	1,16,91,100
21. Ports and Pilotage	...	...	37,017	51,371	37,017	51,371
22. Education	...	...	83,17,005	94,01,185	83,17,005	94,01,185
23. Ecclesiastical	3,27,254	3,54,969	...	...	3,27,254	3,54,969
24-A. Medical	...	...	17,99,320	21,63,105	17,99,320	21,63,105
24-B. Sanitation	...	...	17,04,832	16,38,825	17,04,832	16,38,825
25. Political	53,298	1,03,024	91,967	89,290	1,45,265	1,92,314
26-A. Agriculture	...	...	12,00,524	12,84,684	12,00,524	12,84,684
26-B. Scientific, etc., Departments	...	...	12,23,215	13,76,876	12,23,215	13,76,876
27. Territorial and political pensions	3,03,126	2,90,101	...	...	3,03,126	2,90,101
28. Civil furlough and absentee allowances.	7,229	6,219	...	...	7,229	6,219
29. Superannuation and retired allowances.	25,841	31,817	33,22,797	33,30,450	33,48,638	33,62,267
30. Stationery and printing	3,99,676	8,99,670	12,91,963	14,40,247	16,91,639	23,39,917
32. Miscellaneous	76,396	1,22,051	4,29,201	5,53,345	5,05,597	6,75,396
33. Famine relief — Civil Officers	...	...	...	...	...	...
33. Famine relief — P.W. Officers	6,841	602	...	200	6,841	802
34. Construction of protective railways	— 7,146	— 299	...	...	— 7,146	— 299
35. Do. irrigation works	2,70,293	2,62,897	...	...	2,70,293	2,62,897
36. Reduction or avoidance of debt	...	...	2,50,000	...	2,50,000	...
39. Guaranteed companies	...	...	...	...	...	...
40. Subsidized companies	5,230	11,072	...	...	5,230	11,072
41. Miscellaneous railway expenditure	1,15,089	15,026	...	...	1,15,089	15,026
42. Irrigation (major works)—						
Public Works Officers. (Working expenses).	9,84,705	10,91,394	9,84,705	10,91,395	19,69,410	21,82,789
Public Works Officers (Interest on debt).	14,47,761	15,40,650	14,47,761	15,40,650	23,95,522	30,81,300
43. Irrigation (minor works)—						
In charge of Public Works Officers.	...	...	29,53,410	32,95,491	29,53,410	32,95,491
Do. Civil Officers	...	...	6,17,505	7,69,074	6,17,505	7,69,074
45. Civil works—						
In charge of Public Works Officers.	1,26,263	— 2,79,689	59,69,078	52,14,370	60,95,341	49,34,681
Do. Civil Officers	...	...	20,06,662	23,83,016	20,06,626	28,83,016
Total expenditure charged to Revenue	97,95,172	1,02,33,377	7,52,42,934	7,85,10,126	8,50,38,156	8,87,43,503
Surplus (+) or Deficit (—)	+ 11,91,34,642	+ 13,46,54,225	+ 42,35,704	+ 49,22,069	+ 12,33,70,346	+ 13,95,76,294
Grand Total	12,89,29,814	14,48,87,602	7,94,78,638	8,34,32,195	20,84,08,502	22,83,19,797
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.						
48. State Railways	— 11,14,770	— 6,88,676	...	...	— 11,14,770	— 6,88,676
49. Irrigation works	6,07,438	5,62,967	...	...	6,07,438	5,62,967
Total, Capital outlay	— 5,07,332	— 1,25,709	...	...	— 5,07,332	— 1,25,709
Grand Total (Disbursements)	92,87,840	1,01,07 668	7,52,42,934	7,85,10,126	8,45,30,824	8,86,17,794

Including the receipts and charges of the Civil and Public Works departments, but excluding the figures relating to the Army, the Post Office and Telegraph department, and the Home Accounts, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 22,83,19,797, or Rs. 1,99,11,295 more than that of the previous year; the gross expenditure charged to Revenue rose by Rs. 37,05,347 to Rs. 8,87,43,503; these figures are, however, subject to alteration until the Finance and Revenue Accounts of the Government of India are finally made up by the Comptroller-General.

Surplus revenue

195. The surplus amounted to Rs. 13,95,76,294, or an excess of Rs. 1,62,05,948 over that of 1916–17, which was due to an increase of revenue by Rs. 1,99,11,295 partly counterbalanced by an increase in expenditure to the extent of Rs. 37,05,347. The improvement in revenue occurred mainly under net State Railway earnings (Rs. 76,83,805), Salt (Rs. 33,35,242), Excise (Rs. 31,49,492), Customs (Rs. 7,17,366), Income-tax (Rs. 21,30,368), Forest (Rs. 8,70,337), Scientific and Miscellaneous departments (Rs. 4,84,148)

and Railway freight tax credited as Miscellaneous Revenue (Rs. 12,84,124); while the increase in expenditure was mainly under Land Revenue (Rs. 1,98,175), Forest (Rs. 1,77,671), Police (Rs. 2,16,289), Education (Rs. 10,84,180), Medical (Rs. 3,63,785), Stationery and Printing (Rs. 6,48,278) and Irrigation Works (Rs. 8,85,411).

196. The year opened with a cash balance of Rs. 347 lakhs in the reserve treasury, the revenue treasuries and the Bank of Madras and its branches; the closing balance was Rs. 353 lakhs. **Cash balances**

(*b*) IMPERIAL REVENUE AND FINANCE

197. The receipts on account of Imperial Revenue exceeded those of 1916–17 by Rs. 1,59,79,544, of which an excess of Rs. 76,83,805 occurred under State Railways, Rs. 33,35,242 under Salt, Rs. 15,74,746 under Excise, Rs. 7,17,366 under Customs, Rs. 13,02,070 under Income-tax and Rs. 13,01,466 under Miscellaneous Revenue. The net transfer from Imperial to Provincial Revenues was Rs. 21,756 more than in the previous year. The Imperial expenditure charged to Revenue also exceeded that of 1916–17 by Rs. 4,38,205. The incidence of taxation per head of population was Rs. 3-12-8·2 against Rs. 3-10-9·7 in 1916–17. **General**

198. The receipts from Land Revenue amounted to Rs. 3,51,57,579, or an increase of Rs. 1,49,237 over those of 1916–17. The more important variations in the district collections were increases in the districts of South Arcot (+Rs. 1·61 lakhs), Kistna (+Rs. 1·55 lakhs), Nellore (+Rs. 0·79 lakh) and Cuddapah (+ Rs. 0·57 lakh), and decreases in the districts of Gōdāvari (— Rs. 1·07 lakhs), Madura (— Rs. 0·50 lakh), Kurnool (— Rs. 0·47 lakh), Tinnevelly (— Rs. 0·41 lakh), Malabar (— Rs. 0·38 lakh) and Chittoor (— Rs. 0·37 lakh). The increase in South Arcot was mainly attributable to the collection in 1917–18 of kists suspended in 1916–17 on account of the cyclone of November 1916, while that in Kistna was due to the levy of heavy penalties on unauthorized irrigation and to the high prices fetched by the sale of waste lands in the Divi island. The fall in Gōdāvari is for the most part explained by the inclusion in the actuals of 1916–17 of penal assessment levied from the Raja of Vizianagram on the Sanapalli lanka suit lands. Delays in the introduction of resettlement rates in certain taluks, the grant of heavy remissions and smaller arrear demand at the commencement of the year account respectively for the decreases in Madura, Tinnevelly and Malabar. The variations in the other districts were caused chiefly by fluctuations in the character of the season. The incidence of taxation per head amounted to Rs. 1–11–2 as against Rs. 1-11-1 in 1916–17, and was highest in the district of Kistna and lowest in Vizagapatam. The expenditure under Land Revenue being entirely Provincial is dealt with in the Provincial section. **Land revenue***

199. The revenue under Customs is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs, exclusive of import duty on salt which was credited to Salt, amounted to Rs. 1,10,77,916 as against Rs. 1,05,49,174 in the previous year. There was an increase of Rs. 7·51 lakhs under import duty, which was the result partly of the enhancement from 3½ to 7½ per cent ad valorem of the duty leviable on cotton piece-goods under the revised tariff of March 1917, and partly of high prices of articles which increased the ad valorem duties. Excise duty on cotton manufactures improved also by Rs. 1·22 lakhs owing to larger production. There was, however, a fall of Rs. 3·22 lakhs under export duty due to a decrease in the exports of tea and rice. The receipts under Land Customs amounted to Rs. 4,25,025 against Rs. 2,36,401 in 1916–17 and the increase was mainly caused by larger imports of kerosene oil and tobacco at Karikal and by the sale of confiscated property credited **Customs**

* The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realizations of opium revenue by the Excise Department) and Income-tax (excluding super-tax) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share. But the incidence of taxation has been calculated with reference to the total receipts.

to Government at that station. The incidence of taxation per head of the population was As. 4–5 against As. 4–2 in 1916–17. The charges amounted to Rs. 4,34,352 as against Rs. 4,30,734 in the previous year.

Opium *

200. Bengal opium is supplied for consumption in this Presidency from the Government storehouse at Ghazipur at a standard rate equal approximately to the cost price per seer. The value at this rate is credited to "Opium" and the difference between this value and the issue price is credited to "Excise" as "Gain on sale-proceeds of opium." The revenue credited to "Opium" amounted to Rs. 5,23,025 as against Rs. 4,90,681 in the previous year. The gain on sale-proceeds also rose from Rs. 6,65,816 to Rs. 7,03,882. The amount of shop rentals and miscellaneous revenue credited to "Excise" was Rs. 5,04,398 against Rs. 4,06,808 in the previous year. The total opium revenue thus realized by the Excise department increased from Rs. 15,63,305 to Rs. 17,31,305 and the incidence of taxation per head of the population was 9·9 pies against 9·8 pies in 1916–17. The charges amounted to Rs. 970 against Rs. 2,929 in the preceding year, the decrease occurring under rewards in opium cases.

Salt

201. The number of salt factories rose from 65 to 71, of which 20 were monopoly factories and 51 excise factories. The factory at Pandraka which had not been worked since 1912 was re-opened for manufacture in 1917. The official year covers the closing months of one manufacturing season and the opening months of another. The main feature of the work of both the seasons of 1917 and 1918 was an endeavour to increase the output of salt so as not only to make good the shortage within the Presidency but also to set some supplies free for the Presidency of Bengal where the conditions arising out of the war have thrown open a new market for the Madras product. The means adopted were mainly the extension of the season of production, increase in the acreage already cultivated, and the opening of new factories and extensions. Steps were also taken to secure for Government a hold on a larger share of the output of salt in licensed factories. The season of 1917 was, however, disastrous to salt manufacture in the north and unfavourable in the centre of the Presidency. The rains of November 1917 were very heavy in most parts of the Presidency and this would normally have retarded the commencement of manufacture for the season of 1918 but, in consequence of the shortage of stocks, greater efforts were made to induce the licensees to commence manufacture much earlier than usual. The total output of the year 1917 amounted to 10,804,767 maunds, of which 3,679,385 maunds were Government salt and 7,125,382 maunds were excise salt as against 5,057,477 maunds and 8,038,764 maunds, respectively, in the previous year. In 1918 the outturn up to 31st March amounted to 1,043,073 maunds as against 820,767 maunds in 1917. The quantity of duty-paid salt imported by sea from the Bombay Presidency fell from 1,400,063 maunds to 1,268,638 maunds and that imported by rail from Bombay and Goa fell from 472,245 maunds to 307,030 maunds, the decreases being due to the shortage of stocks in Bombay and the difficulty of obtaining freight. The quantity of duty-bearing salt imported by sea, chiefly from the United Kingdom, was 1,709 maunds against 4,580 maunds in the previous year. The issues for home and inland consumption of locally-manufactured and imported salt fell from 12,596,982 maunds to 12,160,701 maunds. The quantity issued for export by sea was 73,444 maunds. The quantities issued to the French Government and to the Travancore and the Cochin Darbars were 70,874, 92,536 and 174,874 maunds respectively. The issues to Bengal rose from 113,666 maunds in 1916–17 to 608,507 maunds in 1917–18 as a consequence of shortage in the import of foreign salt into Calcutta. The available stock of Government and excise salt at the end of the year was 3,744,281 maunds as against 4,557,054 maunds in the previous year. The year's revenue amounted to Rs. 1,62,01,081 against Rs. 1,28,65,839 in 1916–17.

* *Vide* footnote under Land Revenue on page 89.

The increase was attributable partly to the enhanced rate of duty introduced from 1st March 1916, the full effect of which was not felt till the year 1917–18 owing to the operation of the system of credit sales, and partly to the sale of Government salt at auction instead of at a fixed price. The system of auction sale was resorted to as being calculated to put down the high prices of excise salt attended with violent fluctuations, especially in the months of November and December, when there was a large demand for salt from Bengal. But the system, while tending to achieve the desired end, yielded for Government a revenue of Rs. 15·46 lakhs more than what would have resulted from sale at a fixed price, mainly in consequence of speculative buying by Calcutta merchants. The incidence of taxation which is calculated with reference to the rate of inland consumption fell from As. 4-10·3 in 1916–17 to As. 4–4·5 in 1917–18. The charges amounted to Rs. 18,15,934 as against Rs. 17,86,343 in the previous year.

Excise * (Abkari)

202. The excise revenue rose from Rs. 1,75,28,680 to Rs. 1,89,67,770. The increase occurred mainly under country spirits and toddy. The incidence of taxation per head was As. 14–7·4 against As. 13-6·6 in the previous year. The charges amounted to Rs. 9,16,535 in 1917–18 as compared with Rs. 9,05,097 in 1916–17.

Stamps *

203. The revenue from stamps decreased from Rs. 77,94,639 to Rs. 77,11,598 and the incidence of taxation per head fell from As. 6-0·2 to As. 5–11·5. The charges rose, however, from Rs. 2,23,190 to Rs. 2,43,802, the increase being due chiefly to heavy railway charges paid on supplies obtained from the Controller of Stamps, Calcutta, and to larger supplies of stamp paper made from the central stores.

Income-tax * (excluding super-tax)

204. The receipts from income-tax, excluding super-tax, amounted to Rs. 38,32,870 as against Rs. 30,04,572 in the previous year. The increase was mainly due to more careful assessments and to the commercial prosperity arising out of the war. The incidence of taxation was As. 2–11·5 per head as against As. 2–3·8 in the previous year. The charges were Rs. 34,146 as against Rs. 33,080 in 1916–17.

Super-tax

205. The revenue under super-tax represents the tax imposed from the 1st April 1917 under Act VIII of 1917, on large individual incomes in excess of Rs. 50,000 per annum, in addition to the ordinary income-tax. The proceeds of the tax are wholly Imperial and the receipts of the year 1917–18 amounted to Rs. 4,73,772. The incidence of taxation per head was 2·2 pies, and no charges were incurred during the year for collection.

Other Imperial receipts

206. Imperial revenue from other sources amounted to Rs. 5,09,83,226 and exceeded the corresponding revenue of 1916–17 by Rs. 89,51,580, the excess consisting chiefly of Rs. 76,83,805 in the net State Railway receipts and Rs. 12,84,124 being the proceeds of the small surcharge levied on railway goods traffic from 1st April 1917 which was subsequently treated as a tax and brought to account as Miscellaneous Imperial Revenue. Larger traffic receipts counterbalanced by an increase in the share of surplus profits paid to Railway Companies and Native States account mainly for the excess under State Railway receipts.

Transfers between Imperial and Provincial

207. The important variations under this head were (*a*) the grant of a recurring assignment of Rs. 4 lakhs to Provincial revenues for improving the training and pay of teachers in primary and secondary schools ; (*b*) the discontinuance of the recurring assignment of Rs. 2,50,000 made to Provincial revenues in connexion with the apportionment of famine relief expenditure, consequent on certain changes introduced with effect from the 1st April 1917 in the method of adjustment of such expenditure between the Imperial and the Provincial sections ; and (*c*) the further payment of Rs. 1,36,500 from Provincial to Imperial revenues in addition to Rs. 6,25,000 paid in 1917–18 on account of the revenue realized in

* *Vide* footnote under Land Revenue on page 89.

Madras in 1916–17 from the enhancement of the rates of income-tax made for the purpose of meeting the needs of the Imperial Government.

Other Imperial expenditure

208. The remaining Imperial expenditure amounted to Rs. 67,87,639 against Rs. 64,13,799 in 1916–17. The noteworthy fluctuations in the year were an increase of Rs. 5 lakhs under Stationery and Printing and a decrease of Rs. 4·06 lakhs under Civil Works. The former was caused by heavy expenditure on stationery purchased for the central stores, while the latter was only nominal, as it was chiefly due to a receipt of Rs. 3·99 lakhs from the sale-proceeds of the sites acquired in previous years for the construction of a new building for the Madras Currency Office having been taken in abatement of the charges under this head to which the expenditure on the acquisition was originally debited.

Capital outlay on State railways and Irrigation works not charged to Revenue

209. The capital outlay on Irrigation Works not charged to Revenue amounted to Rs. 5,62,967 against Rs. 6,07,438 in 1916–17 ; that on State Railways was *minus* Rs. 6,88,676 in 1917–18 against *minus* Rs. 11,14,770 in 1916–17. The figure *minus* Rs. 6,88,676 in 1917–18 is the net result of a recovery of Rs. 6·30 lakhs advanced to the Tinnevelly-Tiruchendur Railway in 1916–17 and a *minus* outlay of Rs. 0·71 lakh under South Indian Railway. The expenditure of this railway charged to final heads was *minus* Rs. 0·60 lakh as compared with Rs. 8·46 lakhs in the previous year and the decrease occurred chiefly under rolling-stock, Rs. 3·65 lakhs being under locomotives and Rs. 3·60 lakhs being under carriages and wagons. Under suspense accounts there was a net debit of Rs. 0·29 lakh in 1917–18 against a net credit of Rs. 26·29 lakhs in 1916–17 which occurred for the most part under stores owing to heavy issues for renewal works and to large sales to Government departments in that year.

Imperial loans

210. The opening balance under Imperial loans on the 1st April 1917 was Rs. 1,72,70,023. The loans granted during the year amounted to Rs. 21,30,004. A sum of Rs. 4 lakhs was advanced to the Madras Corporation for expenditure on water-supply ; Rs. 11 lakhs to the Madras Port Trust (Rs. 2 lakhs being for improvements to the Harbour and Rs. 9 lakhs for repairs to the damages caused by the cyclone of November 1916) ; and Rs. 6·30 lakhs to the District Board, Tinnevelly, in connexion with the construction of the Tinnevelly-Tiruchendur Railway. The repayments amounted to Rs. 9,04,344 ; the chief items being Rs. 40,415 by the Madras Corporation, Rs. 2,84,007 by the Madras Port Trust, Rs. 27,619 by the Madras Coast Lights Fund, Rs. 36,657 by the Tanjore District Board Railway and Rs. 5,00,833 by the Tinnevelly District Board Railway. The closing balance of the year was Rs. 1,84,95,683. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year, viz., Rs. 28,600, was duly paid. On the 31st March 1918, this sinking fund held Government securities of the face value of Rs. 14,14,200.

(*c*) Revenue and Finance other than Imperial

Provincial revenues

211. The Provincial accounts opened with a balance of Rs. 1,52,37,920 on the 1st April 1917 and closed with a balance of Rs. 2,01,59,989 on the 31st March 1918. The transactions of the year thus yielded a surplus of Rs. 49,22,069, which was the net result of an aggregate revenue of Rs. 8,34,32,195 and an expenditure of Rs. 7,85,10,126.

Land revenue *

212. The receipts from Land Revenue amounted to Rs. 3,51,57,579 or Rs. 1,49,237 in excess of those of the previous year. The more important variations in the district collections are explained in the Imperial section. The charges were Rs. 1,24,74,408 as against Rs. 1,22,76,233 in the previous year, the increase being chiefly due to smaller recoveries on account of estate surveys.

* The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realization of opium revenue by the Excise Department) and Income-tax (excluding Super-tax) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share. But the incidence of taxation has been calculated with reference to the total receipts and is mentioned in the Imperial section.

213. The receipts from Stamps, Excise and Income-tax amounted respectively to Rs. 77,11,599, Rs. 2,01,76,050 † and Rs. 38,32,870 as against Rs. 77,94,638, Rs. 1,86,01,304 and Rs. 30,04,572 in the previous year. Explanations of the increases under Excise and Income-tax are given in the Imperial section. The corresponding charges were Rs. 2,43,803, Rs. 9,17,503 ‡ and Rs. 34,147 as against Rs. 2,23,190, Rs. 9,08,025 and Rs. 33,079, respectively, in the previous year. The increase in the charges under Stamps is explained in the Imperial section. * Stamps, Excise and Income-tax

214. The revenue from Forests amounted to Rs. 54,66,463 against Rs. 45,96,126 in the previous year. The increase of Rs. 8·70 lakhs occurred chiefly under timber and sandalwood removed from the forests by Government agency (Rs. 5·18 lakhs) and under firewood and other minor produce removed by consumers or purchasers (Rs. 3·02 lakhs). The large outturn of the first final fellings in the South Malabar division, the sale of timber at enhanced prices to the Military Department from the South Coimbatore division, and the sale of old stock in the Nilgiris and the North Mangalore divisions contributed mainly to the increase under timber; that under sandalwood was brought about by the extraction and sale of a larger quantity of sandalwood in the Western and Southern circles and by the high prices obtained for them at the auction sales. The excess under firewood was mostly due to the sale of land and of the growth thereon in Vettangudi and other reserves in the South Arcot district and the enhanced prices obtained for fuel coupes in certain other districts. The sale of rela bark and the high prices fetched by tanning barks account for the excess under "Other minor produce." The charges of the department amounted to Rs. 30,20,349 against Rs. 28,42,678 in the previous year. Allowing for Rs. 0·84 lakh included in the latter amount on account of the acquisition of the Attapadi blocks in the Central Coimbatore division, and the Putlampalli shrotriyam forests in the Cuddapah district, there was an excess expenditure of Rs. 2·62 lakhs, Rs. 2·29 lakhs being under "Conservancy and Works" and Rs. 0·33 lakh under "Establishment". The excess under "Conservancy and Works" appeared chiefly under timber (Rs. 0·43 lakh) and grass and other minor produce (Rs. 1·33 lakhs) removed from the forests by Government agency. The increase in the latter case represented for the most part the charges connected with the preparation of hay for supply to the Military department. Forests

215. The receipts under registration were Rs. 24,72,459 against Rs. 24,70,160 in the preceding year. The charges amounted to Rs. 13,39,697 or Rs. 27,458 more than in the foregoing year, the increase being partly due to a full year's charge on account of the raising of the minimum pay of clerks in registration offices to Rs. 20 per mensem, which scheme was brought into force only on the 1st June 1916. Registration

216. The canal revenue collected during the year amounted to Rs. 2,69,040, or Rs. 21,562 more than in the previous year. Canal revenue

217. The Provincial receipts under the remaining heads amounted to Rs. 69,40,635 § and were higher than those of the previous year by Rs. 5,89,873. There were increases under nine heads (+Rs. 8,45,162) and decreases under an equal number of heads (−Rs. 2,55,289). The increases were chiefly under Scientific and Miscellaneous departments (+Rs. 4·84 lakhs), Jails (+ Rs. 2·01 lakhs), Stationery and Printing (+ Rs. 0·43 lakh), and the decreases were chiefly under Miscellaneous Revenue (−Rs. 1·41 lakhs) and Civil Works in charge of Civil Officers (−Rs. 0·68 lakh). The increase under Scientific and Miscellaneous departments occurred mainly under Cinchona Plantations, the restrictions on shipping having created an increasing demand for the Government product, and under receipts Other Provincial receipts

* *Vide* footnote under Land Revenue on page 92.
† Includes share of opium revenue credited to this head.
‡ Includes expenditure relating to opium charged to this head.
§ Excludes net amount transferred from Imperial to Provincial which has been dealt with in the Imperial section.

of the Fishery Bureau mainly from the sale of soap manufactured by the Government Soap Factory at Calicut. Heavy demands from the Military department for jail-made goods account for the increase under Jails. The decrease under Miscellaneous Revenue is mainly due to a special credit of Rs. 0·84 lakh included in the actuals of 1916–17, being refund of a temporary contribution paid to the District Board of Guntūr, and to smaller adjustments on account of lapsed deposits credited to Government. Variations in the amounts of unexpended balances of Provincial contributions refunded by local bodies explain the decrease under Civil Works in charge of Civil Officers.

Other Provincial expenditure

218. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 6,04,80,219 and was more than that of the previous year by Rs. 28,32,679, which was the net result of increases under nineteen heads (+ Rs. 39,58,669) and decreases under six heads (— Rs. 11,25,990). The increases were chiefly under Education (+ Rs. 10·84 lakhs), Civil Works in charge of Civil Officers (+Rs. 8·76 lakhs), Medical (+ Rs. 3·64 lakhs), Minor Irrigation works in charge of Public Works Officers (+Rs. 3·42 lakhs), Police (+ Rs. 2·16 lakhs), Minor Irrigation Works in charge of Civil Officers (+ Rs. 1·52 lakhs), Scientific and Miscellaneous departments (+ Rs. 1·49 lakhs), Stationery and Printing (+ Rs. 1·48 lakhs), Miscellaneous expenditure (+ Rs. 1·24 lakhs), Working Expenses of Major Irrigation Works (+Rs. 1·07 lakhs) and Jails (+ Rs. 1·05 lakhs). The bulk of the increase under Education was in the subsidies paid in support of municipal and local board schools, and it was partly met out of an Imperial grant of Rs. 4 lakhs assigned by the Government of India to this province for improving the pay and training of teachers in primary and secondary schools. Larger grants paid to local bodies for roads and bridges (chiefly for village roads) and for the maintenance of hospitals and dispensaries account respectively for the increases under Civil Works in charge of Civil Officers and under Medical. That under Minor Irrigation Works (Civil and Public Works) is due partly to heavy expenditure on repairs to damages caused by the cyclone of November 1916 and partly to the transfer to the Public Works section of this head with effect from 1st April 1917 of the charges connected with the Chepad project which were formerly treated as Capital expenditure not charged to Revenue and shown under the head "49. Irrigation". A full year's charge on account of the revision of pay of the constabulary introduced with effect from the 1st June 1916, the opening of an additional police training school at Anantapur in March 1917 and larger expenditure on travelling allowance of the police force due to revisions in the scale of railway passenger fares explain the increase under Police. Under Scientific and Miscellaneous departments, there was heavy expenditure under Cinchona Plantations and under Fishery Bureau, the increase in the latter case being connected with the manufacture of soap by the Government Soap Factory at Calicut. The excess under Stationery and Printing appeared in the cost of stationery supplied to Government offices, owing to the rise in the price of stationery articles caused by the war; and that under Miscellaneous Expenditure represented the amount of grants paid to district boards for aid to informal panchayats. The increase under Working Expenses of Major Irrigation Works occurred chiefly in the Gōdāvari and the Kistna Delta systems and in the expenditure relating to the Kurnool-Cuddapah canal. Larger outlay on jail manufactures to meet the heavy demands of the Military department brought about the excess under Jails. The decreases as compared with the previous year were chiefly under "Reduction or avoidance of debt" (—Rs. 2·50 lakhs) and under Civil Works in charge of Public Works Officers. The charges under the former head were connected with a scheme introduced in 1907 for the apportionment of famine expenditure between Imperial and Provincial funds. As a result of certain changes introduced in the method of adjustment of such charges, the adjustments under this head have ceased with effect from 1917–18. The decrease under Civil Works in charge of Public Works Officers is mainly attributable to credits received

for large issues of materials to the Military department from the Public Works Stores in 1917–18 and to the actuals of 1916–17 having included the cost of large quantities of materials obtained from home for the Madura Drainage division, as well as a payment of Rs. 1·35 lakhs made to Messrs. Crompton & Co. on account of damages awarded to them for breach of contract in connexion with the construction of a building for the Collector's office at Madura.

Provincial loans

219. The Provincial Advance and Loan Account (including loans to local bodies for railway construction) opened with a balance of Rs. 94,55,363 on the 1st April 1917 and closed with a balance of Rs. 96,31,822 ; advances amounted to Rs. 12,61,977 and repayments to Rs. 10,85,518. Ryots received advances to the extent of Rs. 8,63,289 as against Rs. 7,16,309 in the previous year. The District Boards of Malabar, Coimbatore and Trichinopoly took advances of Rs. 54,800, Rs. 18,800 and Rs. 18,200, respectively, for the construction of bridges, and the District Board of Guntūr took Rs. 75,000 for the extension of village sites. Rupees 22,000, Rs. 10,000, Rs. 9,500, Rs. 8,500, Rs. 8,000 and Rs. 6,000 were advanced, respectively, to the Guntūr, Vizagapatam, Tiruvālūr, Palamcottah, Vizianagram and Cocanada Municipal Councils for town survey. Rupees 12,000 more were advanced to the Guntūr Municipal Council for improvements to water-works and Rs. 10,000 more to the Vizianagram Municipal Council for the acquisition of buildings. The Madura Municipality borrowed Rs. 67,000 for water-supply ; the Ellore Municipality Rs. 35,000 for the construction of a building for the Municipal office ; the Vellore Municipality Rs. 33,840 for drainage works ; and the Cuddapah Municipality Rs. 5,000 for the construction of a new travellers' bungalow. Rupees 4,900 were advanced to the Zamindar of Punganur to complete the survey of his estate. No loans were granted to co-operative credit societies during the year.

Local Funds

220. The following paragraphs deal with funds raised from special sources and devoted to special objects and not to general purposes of the administration (Imperial and Provincial). The funds comprised under the head " Local Funds " are local funds constituted under Act V of 1884, the Irrigation cess fund, Port and Marine funds, and other funds which are mentioned below seriatim :—

Local Funds Act V of 1884

(1) The Local funds constituted under Act V of 1884 opened with a balance of Rs. 80,98,050 and closed with a balance of Rs. 97,65,100. Exclusive of debt head transactions, the receipts and charges amounted to Rs. 2,01,69,769 and Rs. 1,70,46,219, showing a surplus of Rs. 31,23,550 against a deficit of Rs. 9,39,202 in the preceding year. The chief factors which contributed to this result were larger receipts under Education (+ Rs. 5·21 lakhs) and under Civil Works (+ Rs. 11·25 lakhs), caused mainly by enhanced contributions received from Provincial revenues in support of local board schools and for the construction of roads and bridges, and smaller expenditure under construction of railways, owing to the completion of the Salem-Suramangalam Railway and the Tirutturaippūndi-Vedāranniyam Railway in 1916–17, the postponement of the completion of the Tinnevelly-Tiruchendūr Railway until the end of the war, and the credits realized on account of certain materials purchased for the said railway having been taken over by the Munitions Board and the South Indian Railway Company. The receipts and charges on account of debt head transactions amounted respectively to Rs. 41,23,082 and Rs. 55,79,582. The District Board of Tinnevelly obtained a loan of Rs. 6·30 lakhs from Imperial funds in connexion with railway construction but repaid Rs. 5·01 lakhs out of it before the close of the year. The funded capital of District Boards, which was Rs. 1,35,11,000 on the 31st March 1917, rose to Rs. 1,40,60,000, of which Rs. 1,16,12,000 represented investments of railway cess balances and the balance of Rs. 24,48,000 investments on account of endowments, provident funds and other institutions. The closing cash balance of local boards was ear-marked as follows : railway cess funds (Rs. 9·07 lakhs), endowment funds (Rs. 4·49 lakhs),

unexpended amount of Provincial grants (Rs. 33·03 lakhs) and debt heads (Rs. 19·68 lakhs). Thus the net balance available for general purposes of the district funds was Rs. 31·38 lakhs, and the District Board of South Kanara closed with a small deficit cash balance under general funds.

Bhadrāchalam Nugur Special Fund

(2) The receipts of this fund consisted mainly of the payments made by the proprietors and of the deductions made from the land revenue collections (beriz) of Government villages, no cess being levied from the proprietors on account of the emoluments of village servants. The receipts and charges of the fund amounted to Rs. 9,333 and Rs. 10,246, respectively, against Rs. 9,458 and Rs. 8,455 in the previous year, and the fund closed with a credit balance of Rs. 15,636.

Irrigation Cess Fund.

(3) This fund exists in the districts of Chingleput, Trichinopoly, Madura and Coimbatore. The fund opened with a balance of Rs. 99,891 and closed with a balance of Rs. 82,662. The receipts and charges amounted to Rs. 43,613 and Rs. 60,842, respectively, against Rs. 42,831 and Rs. 44,977 in the previous year. The entire assets of the Vangal channel amounting to Rs. 17,961 were made over during the year to the Public Works department in discharge of the expenditure by it in the improvement of the channel up to the 18th January 1917.

Port and Marine funds

(4) These funds consist of Port Funds (Act XV of 1908), Pilotage Funds (outports), Landing and Shipping Funds and the Madras Coast Lights Fund. The Port Funds are again subdivided into Madras and Minor Ports Funds.

The Madras Port Fund

The Madras Port Fund opened with a balance of Rs. 15,348 and closed with a balance of Rs. 34,865. The income of the fund amounted to Rs. 1,25,884 and its expenditure to Rs. 1,06,367.

The Minor Ports Fund

The Minor Ports Fund opened with a balance of Rs. 1,63,719 and closed with a balance of Rs. 57,173; the receipts and charges amounted to Rs. 2,64,230 and Rs. 3,70,776 respectively. The fund advanced a loan of Rs. 11,000 to the Madras Coast Lights Fund. A sum of Rs. 28,607 in all was repaid towards the principals of the loans taken by the Cocanada, Negapatam, Adirāmpatnam, Tuticorin, Cochin and Calicut Landing and Shipping Funds. Free grants to the extent of Rs. 24,350 were also made to the Cocanada and Cochin Landing and Shipping Funds and to the Madras Coast Lights Fund. The security balance at the credit of the fund was Rs. 8,57,400 (face value).

Pilotage funds (outports)

The income and expenditure of the Pilotage Funds (outports) amounted to Rs. 11,424 and Rs. 10,227 respectively. The opening and closing balances were Rs. 3,503 and Rs. 4,700 respectively.

Landing and Shipping funds

The opening balance of the Landing and Shipping Funds amounted to Rs. 3,77,942, the receipts and charges to Rs. 2,37,924 and Rs. 2,99,845 respectively, and the closing balance to Rs. 3,16,021. The invested balance to the credit of the funds was Rs. 3,27,800 (face value).

The Madras Coast Lights Fund

(5) The Madras Coast Lights Fund opened with a balance of Rs. 31,224 and closed with a balance of Rs. 39,975; the receipts and charges of the year were Rs. 1,30,064 and Rs. 1,21,313 respectively.

Cantonment funds

(6) The receipts and charges of these funds amounted to Rs. 5,28,728 and Rs. 5,38,254 respectively, the result being a deficit of Rs. 9,526 which reduced the balance from Rs. 1,16,348 to Rs. 1,06,822.

Cantonment Hospital Fund, Secunderabad

(7) The fund opened with a balance of Rs. 32 and closed with a balance of Rs. 227. The receipts and charges amounted to Rs. 10,910 and Rs. 10,715 respectively.

Civil Hospital Fund, Secunderabad

(8) The fund opened with a deficit balance of Rs. 1,543 under general funds, which was made good in April 1917 by a contribution received from the Secunderabad Local Abkāri Fund. The receipts and charges amounted to Rs. 75,520 and Rs. 67,812 respectively. The closing balance was Rs. 6,165.

University Fee Fund

(9) The opening and closing balances were Rs. 54,502 and Rs. 36,337 respectively. The receipts and charges amounted respectively to Rs. 6,16,309 and Rs. 6,34,474. The invested balance to the credit of the fund was Rs. 7,56,800 (face value). A sum of Rs. 2,90,000 was withdrawn

from the fixed deposit with the Bank of Madras and the balance in fixed deposit with the Bank at the close of the year was Rs. 15,000.

(10) The receipts and charges amounted to Rs. 10,356 and Rs. 10,415 respectively and the cash balance to the credit of the fund was reduced to Rs. 749. Kumbakōnam College Hostel Fund

(11) The opening and closing balances were Rs. 57,601 and Rs. 53,689 respectively. The receipts and charges amounted to Rs. 31,885 and Rs. 35,797 respectively. There was an invested balance of one lakh of rupees. Mrs. A. V. Narasinga Rao's College Fund

(12) The Vizagapatam Hospital Fund opened with a balance of Rs. 3,254. The receipts and charges were Rs. 17,231 and Rs. 16,500 respectively and the closing balance was Rs. 3,985. Vizagapatam Hospital Fund

(13) The receipts and charges of the Hyderabad Residency Bazaar Fund amounted to Rs. 1,52,302 and Rs. 93,962 respectively, and the balance was thus raised from Rs. 1,59,430 to Rs. 2,17,770. Hyderabad Residency Bazaar Fund

(14) The opening balance was Rs. 3,21,641. The receipts and expenditure were Rs. 8,62,876 and Rs. 9,87,062 respectively, thus reducing the closing balance to Rs. 1,97,455. Secunderabad Local (Abkári) Fund

MUNICIPAL REVENUES

221. The receipts of mufassal municipalities amounted to Rs. 91,74,753 and the charges to Rs. 92,69,640. The balance at their credit was Rs. 33,03,118 against Rs. 33,98,059 in the previous year. The receipts and charges of the Madras Corporation amounted to Rs. 49·25 lakhs and Rs. 39·32 lakhs, respectively. The balance at the credit of the Corporation at the end of the year was Rs. 9·93 lakhs as against Rs. 9·40 lakhs in the previous year.

EXCISE ADMINISTRATION

[*Report on the administration of Abkári Revenue for 1917–18*]

222. A committee was appointed during the year to examine the question of liquor consumption in the City of Madras. The main conclusions arrived at by that body were that there had been no increase in the consumption of arrack if all kinds were considered together ; that the consumption of toddy was nearly stationary ; that the consumption of country brewed beer had fluctuated in an irregular manner, while that of foreign liquor had decreased and that of cheap European spirit had altogether ceased ; and that drunkenness had not increased. The findings of the committee were accepted by Government. **General**

223. The contract distillery system was extended to 93 villages in the Golgonda taluk of the Vizagapatam Agency and the tree-tax system to 19 Agency villages in Gōdāvari. The arrangements for the supply of arrack in the Attapadi valley in the Malabar district were revised and certain definite general principles were introduced in regard to the supply of liquor to estate labour in planting areas. The excise duty on country spirits was enhanced by ten annas per proof-gallon in seven districts, the rates of fixed fee for retail "off" licences for foreign liquor were raised and further restrictions were imposed on the location of shops. These measures will, it is hoped, have some effect in reducing the temptation to drink. Other changes, some of them of importance, have taken effect from the 1st April 1918. **Administrative changes**

224. The Excise Advisory Committees were reconstituted so as to provide for a larger representation of non-official opinion and the Excise Advisory Committee for the City of Madras has since the end of the year been replaced by an Excise Licensing Board with power to determine the number and location of shops for the sale of intoxicants of all kinds. Of **Licensing Board and Advisory Committees**

the recommendations made by Excise Advisory Committees and accepted by Collectors special mention may be made of the case of the Salem Municipality, where 11 out of 14 arrack shops and 6 out of 12 toddy shops were abolished as an experimental measure, those retained being removed to localities outside the town.

Measures in aid of temperance

225. The temperance activities of the Reddis' Conference at Loddaputti in the Ganjām district is worthy of note. At this Conference the Reddis resolved to abstain from liquor, and in order to encourage the movement the Collector ordered the closure of twenty arrack shops with an aggregate annual rental of Rs. 13,044 in the area affected. The experiment in the matter of the institution of tea and coffee shops as counter-attractions to the liquor shop through the agency of the local bodies and their contractors continued during the year under review, but it was not very successful and in most places it died a natural death. The Government have now accepted the Board's opinion that, if such experiments are to be successful, they must be backed by private enthusiasm and have promised subsidies to private bodies which will undertake more extended work in this direction; and endeavours are now being made to find private bodies willing and able to undertake the work.

Country spirits

226. The number of shops in the distillery area was reduced by over 250 to 6,619. The total revenue from country spirits in the excise tracts rose by Rs. 11 lakhs to Rs. 161·73 lakhs. The increase occurred under both excise duty and rentals. The proportion of still-head duty to total revenue was 69 per cent. The consumption was more or less stationary, being ·041 proof-gallon per head of the population.

Toddy

227. The number of toddy shops was reduced from 11,851 to 11,399. The total revenue on toddy amounted to Rs. 187·21 lakhs against Rs. 170·85 lakhs in 1916–17. The increase occurred under both vend rents and tree-tax, the vend rents forming 56·2 per cent of the total revenue. The number of trees tapped expressed in terms of coconuts was 23·46 lakhs against 22·24 in 1916–17 and the consumption per head was roughly 2·79 gallons against 2·67 in the previous year.

Foreign liquor

228. The quantity of foreign liquor imported by sea during the year showed a further falling off of over 60,000 gallons, 46·2 per cent of which consisted of "ale, beer and porter". The quantity of "foreign" spirits locally manufactured was 16,953 proof-gallons against 14,232 in 1916–17. The total issues of beer from the local breweries amounted to 1,404,820 gallons and the import from Bangalore to 158,197. Out of the former quantity, 609,897 gallons were exported to places beyond the Presidency. The recorded consumption of foreign liquor of all kinds amounted in terms of absolute alcohol to 106,881 gallons against 116,413 in 1916–17.

Opium and intoxicating drugs

229. The total issues of opium within the Presidency were 37,381 seers against 36,468 in 1916–17, and though the number of shops was reduced from 658 to 650, the licence fees amounted to Rs. 10·02 lakhs against Rs. 8·10 lakhs in 1916–17. The quantity of hemp drugs consumed fell from 47,773 seers in 1916–17 to 47,181 seers and the number of retail licences from 418 to 413. The total revenue from hemp drugs was Rs. 12·23 lakhs against Rs. 11·05 lakhs in 1916–17. The average consumption per head was ·074 tola of opium and ·074 tola of ganja. The number of licences for possession and sale of cocaine and allied drugs was 125 against 121 in 1916–17, while the quantity consumed fell from 65 ounces 3 drams and 25 grains to 41 ounces and 24 grains.

Offences

230. There was a decrease of 5·4 per cent in the number of offences against the abkári law. Illicit traffic in opium and ganja continued, but endeavours were being made to check it by stricter control over shopkeepers and the French Government co-operated by the issue of an ordinance prohibiting the export of these articles from their territory.

CHAPTER VI

VITAL STATISTICS AND MEDICAL SERVICES

DETAILS OF CENSUS

231. *Vide* pages 196 to 205 of the Report on the administration of the Madras Presidency for the year 1911–12.

BIRTHS AND DEATHS (1917)

[*The fifty-fourth annual report of the Sanitary Commissioner, Madras, 1917; Report on the working of the Births, Deaths and Marriages Registration Act of 1886 in the Madras Presidency during 1917–18; Statistics of British India, Part V, Area, Population and Public Health*]

Population

232. Exclusive of Europeans and Eurasians who numbered nearly 41,000, the population of the Presidency according to the census of 1911 was 41,829,232. The population for which vital statistics were furnished continued to be 40,005,735, the excluded number consisting of the hill tribes of Ganjām and Vizagapatam and the inhabitants of the Laccadives and of the Native States of Banganapalle and Pudukkōttai. The estimated population of the year was 44,169,672 or about three and a half lakhs in excess of the previous year's figure. Owing to restrictions imposed during the year on emigration to certain colonies the total number of emigrants was only 253,153 against 356,518 in 1916. Immigrants totalled 227,180 against 270,398 in 1916, and the excess of emigrants over immigrants was thus only 25,973 against 86,120 in the previous year.

Registration of vital statistics

233. Vital statistics continued to be collected, tabulated and registered by much the same defective agency and under the same methods as in previous years. An experimental scheme which was considered to promise the best results was tried during the year under which the registration of these statistics was entrusted to special sub-assistant surgeons in typical areas. This had eventually to be abandoned owing to the dearth of medical subordinates. In rural areas registration of births and deaths was compulsory during the year in only 2,358 villages and 326 unions or in 9 villages and 16 unions more than in the previous year.

Births

The total number of births registered in the year was 1,295,078 or 6,519 less than in 1916, giving a birth-rate of 32·4 per mille as against 32·5 for 1916 on the census population of 1911. Compared with the average for the decennium ending with 1916 the birth-rate of the year showed a slight increase of 0·3 per mille against 0·6 in the previous year. Excluding Madras, which had a birth-rate of 45·4 per mille, the largest birth-rates were recorded in Chingleput (40·9) and Malabar (40·2) and the lowest in Ganjām (22·9) and Nellore (23·5). In fourteen districts there were increased birth-rates as compared with the previous year, the largest increase occurring in Malabar (+ 4·4) and the highest decrease in Cuddapah (— 5·8). Compared with the decennial average Madras showed the largest increase (+ 7·2) and Ganjām the largest decrease (— 6·3). The proportion of male to female births was the same as in 1916, viz., 104·4 to 100. Muhammadans, as usual, returned the highest birth-rates, 36·8 against 36·2 per mille in 1916. There was, on the other hand, a slight fall in the birth-rates among Hindus and Indian Christians which were 32·1 and 30·1,

respectively, as against 32·4 and 30·2 in the previous year. The birth-rates in compulsory and non-compulsory rural areas were 33·3 and 31·6 per mille, respectively, as against 32·8 and 32·0 in the previous year. Calculated on the census population of 1911 the recorded birth-rate in rural towns was 27·3 per mille and the municipal birth-rate 38·9 as against 27·4 and 37·7, respectively, in 1916.

Deaths

During the year 1,049,545 deaths were registered against 875,013 in 1916. The death-rate was thus 4·3 per mille above the previous year's rate and 2·7 above the decennial average. The rise in mortality was conspicuous in Bellary, Anantapur and Kurnool. Deaths among males were, as usual, larger during the year than among females, the proportion being 103·0 to 100. Racially considered the death-rate among Muhammadans was the highest, being 28·0 per mille against 22·0 in the previous year. Hindus and Indian Christians returned 26·3 and 20·3 against 22·0 and 17·8, respectively, in 1916. The infantile death-rate for the districts was also high, being 194·0 per mille of registered births as against 182·8 in 1916 and a quinquennial average of 187·3. The rate of mortality among male infants was 202·3 and in that of female infants 185·3, the incidence of mortality among the former class being the heaviest in Madras (279·8) as in several previous years. The death-rates in rural towns and in municipalities were 23·9 and 37·2 per mille, respectively, as against 19·0 and 31·2 in 1916. The average infantile mortality in municipalities during the year was as high as 246·4 per mille of the registered births as against 230·9 in 1916. The high infantile death-rate throughout the Presidency is attributed to ignorance and to the general unhealthiness of the year. With a view to reducing this mortality in Madras City a special service of midwives to attend to labour cases was started for child welfare work amongst the poorer classes.

Chief diseases

234. Cholera was more severe during the year than in the two previous years, and prevailed in an epidemic form in several parts of the Presidency.

Cholera

The total number of deaths returned from the disease rose from 16,735 or 0·4 per mille to 58,939 or 1·5 per mille against the quinquennial average of 1·2. Kistna and Gōdāvari returned the largest death-rates. The incidence of mortality was heaviest between July and December 1917. An additional cholera party was sanctioned during the year to check the spread of the disease in rural areas, bringing the total number of such parties, to five. These parties, which form the nucleus of a future subordinate sanitary service, proved very useful as a life-saving agency, and measures for their better working and for improving the prospects of the sanitary inspectors attached to them were under consideration during the year. The mortality from the disease in towns which had a protected water-supply has been continuously on the decrease and certain experiments were made during the year, but not with much success, in providing such water-supply in villages.

Small-pox

Deaths from small-pox numbered 34,958 or 0·9 per mille against 21,903 or 0·5 per mille in 1916. The largest death-rate, 2·0 per mille, was registered in South Arcot. The death-rates in rural tracts, rural towns and municipal areas were, respectively, 0·8, 0·7 and 1·4 per mille. These show that proper and systematic attention is not paid to vaccination in towns where it is compulsory.

Plague

Plague was also more prevalent during the year than in several previous years. There were 24,708 deaths or 0·6 per mille from this disease against 11,498 or 0·3 per mille in 1916. Of the thirteen districts which reported indigenous cases the death-rate was largest in Bellary followed by Anantapur, Coimbatore, Salem and North Arcot. Deaths recorded among persons who have been previously inoculated with anti-plague vaccine was 89 against 85 in 1916.

Fevers

The number of registered deaths from fevers rose from 292,491 or 7·3 per mille to 321,902 or 8·0 per mille. The largest death-rate was recorded in Kurnool, and compared with the quinquennial average the highest increases occurred in that district and in Cuddapah. Itinerating dispensaries for the treatment of malaria were working in the Ceded districts among others but did not wholly produce satisfactory results. The question of improving their methods of working was

engaging attention. Anti-malarial measures on a somewhat large scale were undertaken successfully in Madras City and in Bellary town. Dysentery and diarrhœa accounted for 73,394 deaths or 1·8 per mille against 58,444 or 1·5 per mille in 1916. Madras, as usual, headed the list with a mortality rate of 8·1 per mille against 7·2 in 1916. There was also a slight rise in mortality from respiratory diseases. The number of deaths under the all-absorbing head of "all other causes" was 475,175 or 11·9 per mille against 419,731 or 10·5 per mille in 1916 forming nearly one-half of the total number of deaths registered in the Presidency. Particulars about them could not be given owing to the want of suitable registrars of births and deaths who could properly diagnose diseases and correctly classify them.

Dysentery and diarrhœa

Other diseases

235. Amongst Europeans and Eurasians there were 258 births, 109 in Madras City and 149 in the mufassal, and 152 deaths, of which 50 were registered in Madras. The common cause of death continued to be fever; diseases of the heart, diarrhœa and dysentery and pneumonia came next. The number of baptisms and burials for which returns were received by the Registrar-General of Births, Deaths and Marriages was 1,553 and 866, respectively, against 1,627 and 857 in 1916. The number of licences in force under the Indian Christian Marriage Act, 1872, was 726. The number of marriages contracted by European Christians was 449, almost the same number as in the previous year.

Europeans and Eurasians (1917-18)

EMIGRATION AND IMMIGRATION (1917)

[*G.O. No. 497, Home (Miscellaneous), dated the 10th June 1918; Statistics of British India, Part V, Area, Population and Public Health—Emigration*]

236. During the year recruitment for British Guiana was in operation till 10th March 1917. One joint shipment from Calcutta and Madras was made, the number of persons shipped at Madras being 315. None of these were detained in the depot for more than three months. The prescribed proportion of women to men was maintained. Indentured emigration to the West Indies and Fiji was prohibited from 1st April 1917. The management of the depot was good and the emigrants were well cared for. Two thousand four hundred and forty emigrants returned from Natal in five ships. As in previous years there was no emigration to the French Colonies.

Regulated

237. There was a fall of nearly 5,000 in the number of passengers to the Straits Settlements. This occurred principally in the case of the Tanjore district and was due to the restrictions imposed on the emigrants under the Defence of India (Passport) Rules, and to the fact that there was smaller demand for labour on the rubber plantations in the Malay States. The number of passengers to Burma and Ceylon dropped by more than 14,500 and 81,500, respectively, but it is impossible to distinguish emigrants who go to stay from other visitors. The decrease in the case of Burma should be ascribed partly to the smaller number of vessels plying to Rangoon as a result of the war and in that of Ceylon to the restrictions imposed under the Defence of India (Passport) Rules and to the discontinuance of the regular service between Tuticorin and Colombo. The number of persons recorded as having taken passages to ports outside the Presidency but within British India was 6,646 against 7,704 in the previous year, the great majority as usual being passengers from South Kanara to Bombay coast ports. The number of persons who returned from Burma declined with the number who went across, much of this emigration being seasonal. The arrivals from the Straits Settlements increased by nearly 6,000, and this was a further result of the reduced demand for coolies in the rubber plantations of the Federated Malay States. The number of passengers who came from Ceylon decreased more or less in proportion to the number who went there.

Non-regulated

MEDICAL RELIEF (1917)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1917; Statistics of British India, Part V, Area, Population and Public Health—Hospitals*]

General

238. As in the previous year the war threw considerable additional strain on all the officers of the department, superior and subordinate, and this was cheerfully borne and another year of successful work accomplished. Including two retired officers there were only 18 officers of the Indian Medical Service available for charge of districts or of special institutions. Two of these proceeded on leave and no less than twelve were attached to medical institutions in Madras City. One district charge was in the hands of a private medical practitioner and a number of districts and civil surgeoncies were held by civil surgeons and civil assistant surgeons. As many as 37 third-grade and 72 fourth-grade permanent and temporary sub-assistant surgeons were in independent charge of dispensaries. Owing to the great dearth of medical subordinates due to military demands several dispensaries had to be closed throughout the year. It was notwithstanding possible to keep the total number of institutions at much the same figure as in the previous year, while the volume and quality of the relief showed a decided advance.

Institutions

239. There were 709 medical institutions open to the public at the end of the previous year and as a result of several changes which took place during 1917, 707 hospitals and dispensaries were actually working at its close, of which 40 were women and children's institutions. Sixteen public hospitals were maintained by the State including one for women and children. Local funds maintained 510 dispensaries, 21 of which were for women and children. Eighty institutions were maintained by private agencies, 27 of which received State aid. Eighteen of these were maintained for women and children. Forty-eight were railway hospitals and the remaining 53 were State institutions maintained for the benefit of special departments, of which no less than 42 were for the Police. The Bellary headquarters hospital was taken over by the Government from the municipality in December 1917 and arrangements were made for the assumption of Government control over 16 other headquarters hospitals in the Presidency, so that these institutions may be maintained in a greater state of efficiency than has previously been the case under municipal control. Some of these hospitals will, in due course, become centres of clinical instruction for new medical schools which the Government contemplate establishing in many parts of the Presidency.

Relief

240. At the State-public, local fund and private-aided institutions, the total number of patients treated rose by nearly 61,000 to 7,623,616. The number of in-patients treated was 107,370 or 9,000 in excess of the preceding year's figure, of whom 18,486 were in the hospitals for women and children. The number of beds available rose by 99 to 3,642 for men and by 106 to 2,948 for women and children. Of the in-patients 63·44 per cent were returned as cured. The number who died was 4,618 giving a death-rate of 4·30 per cent as against 4·11 per cent in 1916. Since the outbreak of the war there has been a steady decline in the number of patients treated in both the in-patient and out-patient departments of the Government General Hospital, Madras. It is not possible to ascribe this to any certain cause and the subject was under investigation by the Surgeon-General. There was hardly any variation from previous years in the proportion of the different races to the total number treated. On the other hand, there was considerable variation in the sex distribution in each class. The total number of operations performed on 298,551 patients during the year was 304,773, showing an increase of 9,031 operations which occurred mainly under minor operations. The number of real and serious operations (major) performed was 17,202. The death-rate among the patients operated upon was the same as in the previous year, viz., 0·21 per cent, and no less than 92·77 per cent were cured. In private non-aided institutions

there was a satisfactory increase both in the number of in-door and out-door patients treated in spite of the closure of two hospitals. In State special and railway dispensaries there was a considerable fall in the number of out-patients. Among the in-patients at the public and aided institutions the largest number of admissions was for systematic diseases (53,689); next came labour cases (45,223) and infective diseases (27,281). The principal diseases treated at the out-patient department, in the order of greatest prevalence, were those of the skin and of the digestive system. In police and railway hospitals malarial fever and digestive troubles contributed the largest number of both in-door and out-door patients. Of small-pox patients treated in the hospitals no death occurred among those that were re-vaccinated, and the rate of mortality clearly showed the necessity not only for primary vaccination but also the importance of revaccination a few years after the primary vaccination. Diseases

241. Under receipts the Government contributed Rs. 8·53 lakhs and the contributions from local funds increased by Rs. 0·83 lakh to Rs. 13·97 lakhs, while those from municipalities decreased by Rs. 0·24 lakh to Rs. 6·84 lakhs. Public subscriptions rose by Rs. 0·27 lakh to Rs. 1·04 lakhs and miscellaneous receipts amounted to Rs. 1·37 lakhs or an increase of Rs. 0·24 lakh. There was thus a very satisfactory net increase of Rs. 1·30 lakhs under receipts which accrued chiefly from subscriptions. The entire expenditure of the hospitals and dispensaries rose by Rs. 11·63 lakhs to Rs. 32·25 lakhs. Excluding the cost of buildings, investments and diets, the daily cost per patient treated amounted to As. 5–1 and the average daily cost per diet was As. 3–5. **Finance**

242. The eighty-third session of the college commenced on the 3rd July 1917 with a strength of 473 students as against 448 in the previous year and terminated on the 27th March 1918. The number of students who were attending the University classes was 292, of whom 15 were women students. The percentage of passes at all the University examinations fell from 63 to 52·5. With the special sanction of Government 21 military pupils, or five more than the number fixed, were admitted into the apothecary department during the year. There was a fall in the number of students who sought admission during the year from other provinces, foreign Governments and Native States in view of the restrictions placed by Government on the admission of such students. Of the 35 women students, 20 were Indian Christians, 10 Europeans and Anglo-Indians, four non-Brahmans and one Brahman. Twenty-five were Dufferin scholars stipended by the Government and two by the Countess of Dufferin Fund. The results attained by the female pupils were satisfactory. A new Physics and Biology room was completed during the year and occupied at the beginning of the autumn session. The College maintained its tradition in the domain of sport. Its teams entered for the various tournaments and won the Madras Cricket Club hockey cup, the Wilson football cup, the Inter-Collegiate hockey cup and the cup for quarter mile in the Regimental sports (Madras and Southern Mahratta Railway), Perambur. The lady students won the Young Women's Christian Association tennis trophy. **Madras Medical College (1917–18)**

243. In all the four medical schools at Rāyapuram, Tanjore, Vizagapatam and Calicut, there were 662 pupils as against 554 in the previous year. The number of private pupils rose from 216 to 247. For the final Board examinations, in March and September 1918, for the diploma of Licensed Medical Practitioners 95 pupils appeared from the Rāyapuram, Tanjore and Vizagapatam schools as against 102 in the previous year. The number of passes fell from 89 to 88. In view of the proposed transfer of the Calicut medical school to Coimbatore, the Government have sanctioned the construction of medical school buildings at Coimbatore at an approximate cost of Rs. 2·16 lakhs. The construction of a new medical school at Tanjore at an approximate cost of Rs. 2 lakhs has also been sanctioned and the foundation stone was laid in February 1918. Plans and estimates for a hostel for the Tanjore medical students were under preparation **Medical schools (1917–18)**

during the year. Improvements were made to the temporary medical school buildings at Vizagapatam. One hostel block was in course of construction at Rāyapuram and sanction has been accorded to the construction of two hostel and kitchen blocks in Royapettah for the use of pupils of the Rāyapuram medical school. Proposals have also been sanctioned for the opening of a new medical school for women in Madras ; the site has been selected and plans and estimates have been called for. Some advance has thus been made towards meeting the increasing demand for medical education.

THE PASTEUR INSTITUTE, COONOOR

(1ST MARCH 1917 TO 28TH FEBRUARY 1918)

244. A greatly increased number of persons came for treatment during the year, the eleventh since the opening of the Institute. The number rose from 1,707 to 2,396, the highest figure on record—higher than that at Kasauli in its eleventh year. Asiatics numbered 2,134 against 1,546 in the previous year and Europeans 262 against 161. Of the total number of patients, three died during treatment and nine within fifteen days from date of completion of treatment. Nineteen died at later dates and are classed as failures, giving a rate of ·79 per cent against ·87 per cent in the previous year. Two hundred and twenty-three persons came for advice, but it was found on inquiry that they had run no risk of infection. They were therefore not treated. At the close of the year 107 persons remained under treatment. The net receipts excluding refunds of advances amounted to Rs. 32,060 and the net payments to Rs. 23,730. The expenditure during the year exceeded that of the previous year by Rs. 8,000 and the excess was due to the prevailing high prices, to payments for delayed European stores and to the outlay on buildings.

LUNATIC ASYLUMS (1917)

[*G.O. No. 227, Local and Municipal (Medical), dated the 22nd May 1918; Statistics of British India, Part V, Area, Population and Public Health —Lunatic Asylums*]

245. In the three asylums (Madras, Calicut and Vizagapatam) there was accommodation during the year for 990 lunatics as against 978 in 1916. The total population in all the asylums on the last day of the year rose slightly from 825 to 845 and the daily average strength increased correspondingly from 833 (625 males and 208 females) to 852 (640 males and 212 females). There has been a steady increase in the number of lunatics admitted from year to year, the increase occurring mainly among civil male lunatics. In 1917 the admissions numbered 300 (268 males and 32 females) as against 276 (222 males and 54 females) in 1916. There was a falling off (from 55 to 39) in the number of criminals admitted. Thirty-three criminals were discharged as against 28 in the previous year. The Madras Asylum received during the year 37 military insanes from overseas. The daily average sick for the three asylums rose from 79·49 to 82·36, but there was a satisfactory fall, from 85 to 77, in the total number of deaths, due largely to the adoption of precautionary measures against the spread of dysentery. The death-rate was 6·84 per cent of the total population as against 7·73 per cent in the previous year. The percentage of cured to the daily average strength rose from 13·69 to 15·49. Several additions were made during the year to the asylum buildings at Madras and Calicut and improvements to the Vizagapatam buildings were in progress. The total expenditure on the three asylums increased from Rs. 1·99 lakhs in 1916 to Rs. 2·05 lakhs. There was a slight, but no marked, increase in receipts.

SANITATION (1917)

[*Annual Reports of the Sanitary Board, Sanitary Commissioner and Sanitary Engineer for 1917*]

Sanitary Board

246. The constitution and personnel of the Sanitary Board remained the same as in the previous year. As the result of a conference which was held in March 1917 for a detailed discussion of type designs, a revised list of such designs was issued and circulated omitting those which served no useful purpose. The limit up to which local boards are competent to prepare plans and estimates for all sanitary works was raised from Rs. 10,000 to Rs. 25,000. The maximum up to which the Sanitary Engineer may pass finally plans and estimates for local board and municipal sanitary works in cases in which he is in agreement with the Sanitary Commissioner was also raised from Rs. 10,000 to Rs. 20,000. During the year the Sanitary Board issued a type design for casualty ward and revised designs for latrine and out-patient dispensary. Thirty sanitary schemes were examined during the year. Plans and estimates for 19 of them were approved and the remaining schemes were returned with remarks. Seventeen of the former, estimated to cost Rs. 28·88 lakhs, related to municipalities and two estimated to cost Rs. 0·72 lakh to local boards.

Sanitary Commissioner

247. Twenty-six municipal towns had the benefit of a protected water-supply as in the previous year. In respect of drainage also, conditions remained practically the same as in 1916. Ootacamund was the only mufassal municipality which possessed a completed drainage scheme, and matured schemes were under execution in Madura and Vellore. Progress in the provision of protected water-supplies and comprehensive drainage schemes was much hampered by war conditions, but as usual considerable minor works of improvements to water-supply and drainage were carried out during the year. First-class health officers continued in the municipalities of Madura and Trichinopoly, but it is regrettable that second-class officers were employed only in Calicut and Cocanada, out of the eight municipalities for which such officers had been sanctioned. Compared with the previous year there was an increase, in the aggregate, under all grades of the subordinate sanitary staff employed, except sweepers for rubbish removal, which showed a slight falling off in numbers. The conservancy plant improved not only in quantity but also in quality. Serious deficiencies in the staff and plant were however still noticeable in several municipalities including some of the larger and wealthier ones. There was a decrease in public latrine accommodation, the number being 1,798 against 1,828 in 1916. It is satisfactory to note that this was due to the diminution in the number of mud-walled and tatty enclosures. A design for a public latrine was issued during the year in supersession of all previous designs. There were 153,805 private latrines against 148,073 in 1916, and of these 133,107 were cleaned by municipal agency and the private scavenging system against 130,889 in the previous year. There was no change in the system of rubbish and night-soil disposal and sewage farming made no advance. The allotment for sanitation amounted to Rs. 27·30 lakhs or 42 per cent of the income, of which a sum of Rs. 18·63 lakhs or 68·2 per cent was spent during the nine months ending with the 31st December 1917. The expenditure on water-supply aggregated Rs. 3·32 lakhs. No major sanitary works of water-supply or drainage were completed or opened by District Boards during the year. Water-supply schemes were under execution in two towns and were under investigation in no less than twelve unions. In rural areas generally water-supply and drainage continued defective. As regards conservancy, out of an aggregate of 52,292 villages, 1,306 unions and other villages were conserved against 1,207 in 1916. The total sum assigned for sanitation was Rs. 11·88 lakhs against Rs. 13·06 lakhs in the previous year, and of this 50·5 per cent was expended during the nine months ending with the 31st December 1917.

District boards

248. Owing to war conditions difficulty was felt in procuring the materials required for water-supply schemes and drainage works under construction. Two drainage works and 18 water-works were under execution by the Public Works Department and by the Sanitary Engineer. Five water-supply schemes and one drainage scheme were drawn up by the Deputy Sanitary Engineers. Plans and estimates for two water-supply schemes and two drainage schemes were finally completed and submitted. One of the former was returned by the Sanitary Board for further test of the quality of the water and the other was not taken up pending the provision of funds by the municipal council. One hundred and forty-six estimates for sanitary works amounting to Rs. 7·30 lakhs received from local bodies were sanctioned, and the Deputy Sanitary Engineers accorded sanction to thirteen estimates amounting to Rs. 11,045. In regard to the efficient maintenance of water-works every endeavour was made to accelerate the introduction of meters for house connexions in spite of their prohibitive cost and the difficulty in obtaining them.

VACCINATION (1917–18)

[*Annual Report on Vaccination in the Madras Presidency and on the work of the Vaccine Section of the King Institute of Preventive Medicine, Guindy, for the year 1917–18; Statistics of British India, Part V, Area, Population and Public Health—Vaccination*]

249. The method of preparing vaccine at the King Institute, Guindy, was the same as in the previous year. Lanolinated vaccine was the general supply made to local bodies and glycerinated vaccine was supplied to Madras City and Colombo as in previous years. The total number of vaccine operations performed during the year was 1,707,300 or 0·43 per cent more than in 1916-17. There was a fall under primary vaccination, but re-vaccination which numbered 274,900 showed an increase of 25·7 per cent over the previous year's figure. The number of deaths in the Presidency from smallpox rose by nearly 60 per cent to 35,000 and the increase in vaccine operations occurred largely in some of the districts where the disease was epidemic during the year. The Government have commended to all district boards the desirability of further extending the provisions of the Madras Local Boards Act, 1884, in regard to compulsory vaccination. The general results of the year were on the whole unsatisfactory, the outstanding features being a fall in the percentage of successful operations and in the number of children under one year of age successfully vaccinated. In the case of primary and secondary vaccination the reported percentage of success again dropped from 86·7 to 83·4 and in the case of revaccination it was 70·8 against 73·4 in the previous year. The total number of successful operations per mille of the population was 31·2 for the Presidency as a whole against 32·8 in the previous year. The number of children successfully vaccinated fell from 589,000 to 550,400. The re-organization of the vaccination staff has been sanctioned and the supervising staff has been strengthened; and it is hoped that more satisfactory results will be achieved in future years. The total cost of the department was Rs. 3·45 lakhs, while the net cost of the lymph was Rs. 0·43 lakh. The average cost of each successful case rose from As. 4–1 to As. 4–3.

CHAPTER VII

INSTRUCTION

GENERAL SYSTEM OF PUBLIC INSTRUCTION

250. *Vide* pages 213 to 228 of the Report on the administration of the Madras Presidency for the year 1911–12.

EDUCATION (1917–18)

[*Report on Public Instruction in the Madras Presidency for the year 1917–18; Statistics of British India, Part VII, Educational*]

Administrative events of the year

251. The permanent retention of the Queen Mary High School, Vizagapatam, and of the Ceded Districts College, Anantapur, was sanctioned during the year. The subordinate inspecting agency was strengthened by the appointment of 24 personal assistants to Inspectors, Assistant Inspectors and Inspectresses, so as to cope with the increasing work of inspection pending the issue of final orders on the scheme for the general reorganization of this agency. Certain important changes were made in the Madras Educational Rules, reprinted during the year, of which mention may be made of those directing the subdivision of secondary schools into high and middle schools, requiring a teacher for every forty pupils instead of fifty in elementary schools, prescribing a form of visitors' book to be kept in elementary schools and abolishing the Final Examination for Teachers' Certificates. Provision was made in the Grant-in-Aid Code for sanctioning grants towards the rent of buildings to be used as hostels and rules were sanctioned for the designing and construction of school buildings. The scale of grants admissible to trained teachers of all grades in aided elementary schools was raised. Certain minor changes were also made in the Code of Regulations for European Schools.

General statistics

252. There was an increase of 1,165 in the number of public institutions and of 41,907 in their strength, representing respectively 3·7 and 2·7 per cent against 2·6 and 2·8 in the previous year. Taking institutions of all classes and grades together there was an increase of 1·9 per cent in number and 2·1 per cent in strength against 2·7 and 2·8 per cent respectively in the previous year. The proportion of male and female scholars to the respective population also increased further from 6·5 and 1·5 per cent to 6·6 and 1·6 per cent respectively. The increase was shared by all the four main classes of the community. The percentage of scholars under instruction to the total population was 4·1.

Finance

253. The total expenditure on education rose from nearly Rs. 217 lakhs to about Rs. 226·5 lakhs, towards which public funds contributed 52 per cent and private funds 48 per cent as in the previous year. Increases occurred under Provincial funds (Rs. 19 lakhs), fees (Rs. 1½ lakhs) and private sources (Rs. 4 lakhs). The total direct expenditure rose by Rs. 4 lakhs to nearly Rs. 158 lakhs. Expenditure on elementary and secondary education increased each by Rs. 2 lakhs and that on special education

by one lakh. Provincial subsidy sanctioned during the year to local bodies, both recurring and non-recurring, rose by nearly Rs. 9 lakhs to Rs. 27·5 lakhs. The total indirect expenditure increased from Rs. 63 lakhs to about Rs. 69 lakhs. Public funds contributed Rs. 2 lakhs to the increase and private sources Rs. 4 lakhs. Notable increases occurred under buildings and furniture (Rs. 4 lakhs) and under hostel (boarding) charges (over half a lakh). The additional recurring grant of Rs. 4 lakhs made available during the year was utilized mainly for raising the minimum pay of teachers in elementary schools and for giving increased grants to aided schools. The Imperial recurring grants aggregated Rs. 21·70 lakhs, which was almost fully spent during the year. Teaching and other recurring grants-in-aid to institutions under private management increased by more than Rs. 2½ lakhs.

University and collegiate education

254. In considering the recommendations of the Royal Commission on the Public Services on matters falling within the sphere of the University, the Senate passed a resolution declaring that the creation of Research Professoriates to be attached to the Universities was necessary and desirable and that inducements should be offered to graduates of any of the Indian Universities to go to other countries for research work or study. In consequence of certain changes made in the regulations relating to the Oriental titles examinations, the institution of a departmental examination in Sanskrit, under the control of the Commissioner for Government examinations, was approved. Certain additions to the courses of study and examinations for degrees in science were sanctioned. Special University lectures were delivered during the year by Professor Oliver Elton of the University of Liverpool and Dr. P. C. Ray of Calcutta.

Colleges

Further affiliation was granted to the American Mission College, Madura, in group (iii) and to the Ceded Districts College, Anantapur, in group (i) of the Intermediate courses and also to the Maharaja's College, Vizianagram, in group (ii-A) and to the Queen Mary's College, Madras, in group (v) of the B.A. Pass courses. The number of first and second grade colleges, both for men and women, remained the same as in the preceding year, viz., 14 and 20, respectively; the number of students in the former rose by 282, while that in the latter fell by 17. Of the 7,989 students on the rolls of arts colleges, 383 were undergoing the B.A. (Honours) course. In all these institutions prominence was given to the tutorial system, which is reported to have worked satisfactorily during the year. The strength of all the four professional colleges, including the Training College, Rajahmundry, which was opened in July 1917, rose by about 100 to 1,238. All these institutions continued to do efficient work during the year. An L.T. class was at work in connexion with the St. Joseph's College, Trichinopoly, the cost of which was met from Provincial funds. Arrangements were made in the Law College for the first time for holding classes for the benefit of the students preparing for the M.L. Degree examination.

Secondary education

255. Public secondary schools for boys increased in number from 345 to 355 and rose in strength by nearly 4,200, or 3·05 per cent, to 140,306. The number of teachers employed in these schools rose by 175, or 3·09 per cent, to 5,830. Efforts were made to increase the number of trained teachers. There was a slight increase in the number of pupils who sat for the Public examination under the Secondary School-leaving Certificate scheme. Certain changes in this scheme were introduced during the year regarding the B group of subjects, the courses in vernacular languages and the position of Sanskrit. The total direct expenditure on secondary schools rose by Rs. 1 lakh to nearly Rs. 39 lakhs, to which public funds contributed 10 per cent, fees 76 per cent, and private funds 14 per cent, as against 11, 74 and 15 respectively in the previous year. Non-recurring expenditure on school and hostel buildings and equipment amounted to Rs. 3·75 lakhs. The average cost of educating each student was Rs. 27-12-0 and the average fee paid was Rs. 21, the corresponding figures for the previous year being Rs. 28-1-4 and Rs. 20-12-0 respectively.

256. The number of public elementary schools for boys rose by 981, or 3·39 per cent, to 29,848 and the number of pupils attending these schools by 27,843, or 2·26 per cent, to 1,259,041. The percentage of male pupils to male population was 5·3 against 5·2 in the previous year. Schools with standards above the fifth showed a considerable increase (30·87 per cent), those with standards below the fifth increased only by 3·6 per cent, while those with standards up to and including the fifth decreased by 0·21 per cent. This is ascribed to the fact that higher standards were opened in a number of schools wherein previously the fifth was the highest. Municipal and board schools alone accounted for 81·52 per cent of the net increase in the number of schools with standards above the fifth and for 26·86 per cent of that in schools with standards below the fifth. There was an increase of 3·75 per cent in the number of teachers employed in public elementary schools and the percentage of trained teachers to the total number rose from 33 to 35. About 600 buildings were constructed for the accommodation of public elementary schools. The total expenditure rose from Rs. 58·36 lakhs to Rs. 60·10 lakhs, the proportion of contributions to it remaining much the same as in the previous year, viz., 73 per cent by public funds, 12 per cent by fees and 15 per cent by subscriptions and other sources. The average cost per pupil fell from Rs. 4–13–0 to Rs. 4–11–3. It was highest (Rs. 12–8–0) in a Government school (mostly in Agency tracts). The proportion of the expenditure which was met from fees remained the same as in the previous year in all classes of schools.

Elementary education

257. There was an increase in the total number and strength of schools for special education. The number of training schools for masters rose by 6 to 62 and their strength by 286 to 4,226. There was a slight accession also to the number and strength of training schools for mistresses, which stood at 24 and 834 respectively. Special facilities were provided for the training of teachers of the secondary grade by attaching secondary training classes to certain colleges and secondary schools, both under public and private management. The question of starting additional training schools both for masters and mistresses was under contemplation. Including the industrial and other technical schools under the control of the Director of Industries, the total number of pupils receiving instruction in technical or industrial subjects was 5,063, of whom 1,421 were pursuing art education, 534 technical education in engineering subjects and telegraphy, 1,764 industrial education (including agriculture) and 1,344 commercial education.

Special education

Training schools

Technical and industrial schools

258. There was a further increase of 153 in the number and of about 7,700 in the strength of non-European schools for girls, while the total number of girls under instruction including those in schools not solely intended for them showed an advance of about 15,000. The strength of the three arts colleges for women rose from 150 to nearly 200, of whom over one-half were reading in the Queen Mary's College for Women, Madras, in which the senior B.A. class was opened during the year. There were in addition 15 female students reading in non-European colleges for men. The number of public secondary schools for girls fell by one to 38, and the strength by 121 to about 8,000. Elementary schools for girls rose by 168 in number, of which 124 were managed by local and municipal bodies, and by about 9,100 in strength. In all classes of public institutions the total number of girls in the elementary stage of instruction showed an increase of about 16,000 or 6 per cent. In the elementary schools for girls 5,819 teachers were employed, of whom 58 per cent were trained. Arrangements were made for the delivery of lectures on hygiene and first aid in some secondary schools for girls and for the inspection by a qualified lady doctor of the health of the inmates of the Brahman Widows' Home, Triplicane, and the hostel attached to the Queen Mary's College for Women. The expenditure in secondary and elementary schools for girls rose from Rs. 13·90 lakhs to Rs. 14·48 lakhs, towards which public funds contributed 63 per cent against 62 in the previous year, fees 7 per cent against 6 and other sources 30 per cent against 32.

Female education

European education

259. Including two industrial schools under the control of the Director of Industries, the total number of institutions intended for Europeans rose by one to 91 and the number receiving instruction increased by over 300 to 8,732. There was a decrease from 670 to 661 in the number of teachers employed in the schools, but the number of those who held diplomas or professional certificates rose from 473 to 479. The establishment of a Training College for the domiciled community in connexion with the Lawrence Memorial School, Ootacamund, was approved during the year and details were under consideration. Four teachers from this Presidency were undergoing training in the Government Training Class, Sanawar. Recurring grants provided from the Imperial allotment for the education of the domiciled community were fully spent during the year. Except in the case of girls in the High school and the Primary school examinations, the results of the European school examinations showed an improvement, the percentage of passes being over 50. The majority of failures was, as usual, in English. The total expenditure on European institutions rose by Rs. 0·60 lakh to Rs. 15·15 lakhs, towards which public funds contributed 37 per cent against 41 in the previous year, fees 16 per cent against 18 and private funds 47 per cent against 41.

Education of Muhammadans

260. The number of institutions chiefly intended for Muhammadans rose by 43 to 2,711 and their strength by over 2,200 to 144,835. Public elementary schools for boys chiefly contributed to this general advance. There was an increase, from 912 to 923, in the total number of institutions managed by Government and local and municipal boards, with an accession also to their strength. There was a slight fall in the number of Muhammadan students in arts colleges, while pupils in secondary schools for non-Europeans rose by 355 to 7,443. Of the public schools intended for Muhammadans 168 were elementary schools for girls attended by about 10,000 pupils. There were 277 students under training in the six training schools for masters. The number of institutions intended for Mappillas rose from 835 to 867 with an increase of about 3,100 in their strength. The expenditure on Muhammadan and Mappilla schools rose by Rs. 0·10 lakh to Rs. 8·30 lakhs, towards which public funds contributed 71 per cent against 68 in the previous year, fees 8 per cent against 10 and private funds 21 per cent against 22. A sum of Rs. 27,000 was spent during the year out of the recurring Imperial grant of Rs. 30,000.

Education of backward classes and others

Panchamas.

Aboriginal and Hill tribes

Blind and deaf mutes

261. The number of institutions intended for Panchamas rose by 123 to 5,814 and their strength by about 6,900 to 165,467. The increase was confined almost entirely to public elementary schools for boys. The total number of Panchama pupils in the different stages of instruction in all classes of public institutions also increased by about 70 to 120,678, of whom 20,220 were girls. The number of schools chiefly intended for the hill tribes of the Agency tracts was 267 and they were attended by 8,691 pupils, of whom 3,795 belonged to the aboriginal classes. The total number of such pupils in all classes of schools in these tracts rose from 4,924 to 5,283. The schools at Palamcottah for the blind and deaf mutes contained 72 boys and 54 girls and continued to do good work. The school at Madras was attended by 37 pupils (15 boys and 22 girls), five of whom appeared for the examination in drawing, four for the elementary and one for the intermediate grade, and all passed. The mission school for the blind at Rentachintala was attended by 7 boys and 8 girls.

Private institutions

262. The total number and strength of private institutions, recognized and unrecognized, declined, the former by 9·3 per cent and the latter by 5·0 per cent, though the number and strength of recognized institutions increased by 18·7 per cent and 26·7 per cent, respectively.

Hostels

263. The number of hostels or boarding-houses rose from 459 to 471, the increase occurring entirely under hostels for boys, which numbered 324 during the year. The number of boarders rose by about 1,500 to 24,252.

REFORMATORY SCHOOL, CHINGLEPUT (1917)

[*Statistics of British India, Part VI, Administrative and Judicial—Jails*]

264. Including six boys under licence, the average strength during the year was 249, or one short of the accommodation available, against 254 in the previous year. The number of admissions was 57, consisting of 35 boys from Tamil districts, 15 from Telugu districts, three from Malabar and one each from Cochin, Coorg, Ujjain and Poona. There were none from Cuddapah, South Kanara, Nellore, the Nilgiris and Rāmnād. Twenty-six were habituals, and the rest casuals. Sixteen of the latter committed serious offences, while the others were fit admissions as they were outside proper parental control and would in time become habituals. The number of pupils discharged in the ordinary course was 51. Three pupils who were physically unfit were discharged under a special order of Government, one escaped and one died. Prior to admission 181 inmates, or 72 per cent, committed theft owing to the conditions under which they lived. Strong criminal traits pointing to inherited mental characteristics accounted for the remaining 28 per cent of the juvenile delinquency, which consisted mostly of cases of housebreaking and theft. The Government have sanctioned a proposal made by the Department of Fisheries to stock the moat with larvicidal fish and to use the water for the rearing of valuable food fish. The work was taken in hand during the year and there was a marked drop, from 150 to 49, in cases of malaria which prevailed during the year. The admissions into hospital, however, slightly increased from 314 to 317 owing to the break-out of cholera, measles and chicken-pox. There was a satisfactory rise in the average number of pupils who gained weight during the year and a corresponding fall in the number of those who lost weight. The conduct of the boys improved and offences decreased from 41 to 28. There was also a slight improvement in the percentage of boys not punished at all and of those who were punished only once. The mark system continued to work satisfactorily and the total average annual earnings rose by over one anna per pupil. Part of the boys' savings to the extent of Rs. 775 was invested in Post Office certificates and the balance in the Postal Savings Bank and the anticipated interest will be paid to the boys as they are discharged. Religious and moral instruction was imparted by outsiders belonging to the pupils respective persuasions. The boys continued to take a keen interest in games. The school went out on a ten days' camp to Chunampet, where the zamindar made all arrangements for their comfort. Of the 26 pupils examined for the elementary school-leaving certificate, nine secured "good" certificates and eight "fair" certificates. The carpentry department was fully occupied throughout the year with outside orders and the articles manufactured fetched a ready sale. The metal work department confined its work to copper and brass, owing to want of aluminium sheets, and the tailoring and garden classes continued to look after the school building and the needs of its inmates. Forty candidates appeared for the Government Technical Examinations and 37 passed, 17 being placed in the first class. The articles turned out in the school continued to receive a considerable measure of public appreciation and the experts of the Industrial departments, who examined the pupils, have testified to the high standard of efficiency maintained by them. From a financial point of view, all the industries were worked successfully, the net profit realized, excluding the cost of supervision, being Rs. 2,485. Of the 56 pupils discharged during the year, 44 or 80 per cent obtained employment and 37 of these were following their trade. During the year no less than 27 boys enlisted in the army and were undergoing training. Deducting the sale-proceeds the net expenditure was Rs. 41,072 against Rs. 41,527 in 1916.

MISCELLANEOUS (1917–18)

Government examinations

265. All the usual examinations were held during the year except the competitive examination for the grade of Indian Military pupil for which the number of applications received was small. The special examination under the Secondary School-leaving Certificate Board for the benefit of teachers who failed in the Matriculation or the Upper Secondary examination and were desirous of being admitted for secondary grade training was held at 52 centres. Seventy candidates registered their names and sixty-nine of them (including a female) appeared. The total number of individual candidates registered for the three grades of technical examinations was 10,838. There was an increase in the number of candidates who registered for the advanced grade. The total number of subject candidates examined was 13,438, of whom 5,745 were successful. The results were better than those of the previous year in the case of the advanced grade. Six of the subject candidates for the advanced, 124 for the intermediate and 284 for the elementary grade were female candidates of whom 5, 93 and 176 respectively were successful. There were 100 vacancies for the grade of civil medical pupil and the number of applications for admission to the competitive examination for this grade was 226, all of which were from holders of secondary school-leaving certificates.

Special tests

The number of centres for the special tests was increased from 20 to 25 so that each district might have a centre. For these tests 3,635 candidates in all registered their names, 2,898 presented themselves for examination and 1,612 passed. The percentage of success in the new Account test, which was held for the first time during the year, rose from 41 to 77. The

Finance

receipts amounted to Rs. 1·99 lakhs and the expenditure to Rs. 1·74 lakhs.

Lawrence Memorial School (1917)

266. The number of pupils on the rolls of the Lawrence Memorial School on the last day of the year was 480 (310 boys and 170 girls) or an increase of eleven over that of the previous year. Twenty-five of these (15 boys and 10 girls) were day-scholars. The number of children who were awaiting admission was 297, of whom 115 boys and 116 girls were the children of British soldiers, including soldiers still in service. Satisfactory progress was made by the pupils, and in his inspection of the school during the year the Inspector of European and Training Schools recorded the opinion that the institution showed improvement in several directions. Since the war eight members of the staff and twenty-four boys have joined the army direct from the school. In addition a considerable number who left school for other appointments have since gone on service. Communications have been received from more than 180 of such old boys at the front, and special inquiries have been received by the school authorities from time to time for boys suitable for appointments as cadets and apprentices for the Navy, Flying Corps and other branches of the Army service. Including the opening balance of the previous year the total receipts amounted to a little over Rs. 3 lakhs and the expenditure to nearly Rs. 2·06 lakhs. The staff and pupils have contributed over Rs. 8,000 to the War funds and the girls have made over 4,000 articles of clothing for soldiers such as shirts and socks.

School of Arts, Madras

267. On the 31st March 1918 there were 303 pupils on the rolls, of whom 23 were females. The average attendance (208) was almost the same as in the previous year. There was a slight increase (from 44·9 to 45·3) in the percentage of artisan pupils in the school. The number of scholarships tenable rose from 92 to 95. Owing to the scarcity of wool there was some difficulty in employing the carpet weavers to the best advantage. The other departments worked satisfactorily. A few lads are sent to the school every year from the Reformatory School, Chingleput, on their release. They are trained as carpenters or metal workers and the experiment is reported to have been so far very encouraging. Many new additions were made to the objects in the museum which increases in usefulness year by year. Of 223 pupils who went up for the technical examinations, 150 were successful.

LITERARY SOCIETIES

268. *Vide* pages 239 to 241 of the Report on the administration of the Madras Presidency for the year 1911–12.

LITERATURE AND THE PRESS (1917–18)

[*Statistics of British India, Part VII—Educational*]

Public libraries

Connemara Public Library

University Library

269. The Connemara Public Library continued to attract a large number of readers, the actual number (22,782) of visitors being slightly higher than in the previous year. Six hundred and fifty standard works, or over 500 more than in the preceding year, were added to the library. As usual dictionaries continued to be in greatest request, belles lettres and works on history coming next. At the University Library the number of readers rose from 8,402 to 10,224, the number of volumes consulted being 14,103 as against 11,213 in the previous year. One hundred and seventy-three University readers as against 133 in 1916-17 claimed the privilege of taking books on loan from the library against a deposit of Rs. 20, the number of volumes consulted by them being 4,053 as against 3,778 in the preceding year. The preparation of a subject index of all the books in the library was taken on hand.

The Oriental Manuscripts Library

The number of manuscripts added to the Oriental Manuscripts Library during the year was 679 as against 698 in 1916–17. The search party after completing the examination and valuation of books in the Tanjore Palace Library as required by Government proceeded in two sections, one to the Northern districts, namely, Kistna, Ganjām and Vizagapatam, and the other to Malabar for the acquisition and collection of manuscripts. Transcripts of the manuscripts in Malabar had to be made and added to the library as the owners were unwilling to part with the originals. The number of visitors to the library and the works consulted rose from 1,462 and 3,183 to 2,212 and 4,517 respectively. As usual works on religion and poetry were those which were consulted most.

Periodicals (1917)

270. There were 217 newspapers at the end of the year as against 211 at the close of 1916. The attitude of the press towards the war was generally satisfactory, but in local politics violence of language became even commoner than before. The political unrest and the acrimonious Home Rule agitation caused a general recovery in the circulation of the journals published in Madras City. *New India* further increased its circulation from 8,500 to 10,000. The circulation of the *Hindu*, which adopted a similar attitude to *New India* on the Home Rule agitation, rose from 5,000 to 6,400. On the other hand, this agitation brought three new dailies into being which adopted a strong anti-Home Rule attitude. *Justice*, the principal organ of this group, had a circulation of 3,000 and combined opposition to the Home Rule propaganda with advocacy of the cause of non-Brahmans as against Brahmans. It was notable for a series of scathing articles on the life and public activities of Mrs. Besant. The effect of the Home Rule campaign was not so marked in the mufassal, where the general tendency to decline continued owing to the increasing rise in the price of paper. Six presses closed owing to demand of security under the Indian Press Act as against four in the previous year and five in 1915. Eight newspapers ceased publication for a similar reason as against nine in 1916 and one in 1915. After the receipt of the order interning her, the Editor of *New India* made a declaration in June 1917 that she had ceased to keep the three presses, the New India Printing Works, Georgetown, the Besant Press, Georgetown, where the *Commonweal* is printed, and the Vasanta Press, Adyar, and the security amounts deposited by her in respect of them were refunded. Shortly afterwards other persons declared themselves severally as keepers of the three presses and deposited a security of Rs. 2,000 each. In the following August the security in respect of the

New India Printing Works was forfeited under section 4 of the Press Act in view of the publication of a series of objectionable articles in *New India*. An enhanced security of Rs. 10,000 was demanded from the keeper of the press under section 5 of the Act and was deposited.

Registration of books (1917)

271. In spite of the war and the high price of paper the number of books registered during the year rose by nearly 70, and the rise in periodicals was more than double that number, the output under these heads being respectively 2,630 and 1,907. There was a noticeable increase in the vernaculars under "Original works," but a considerable number of these consisted of mere pamphlets or even leaflets. The largest number of publications was in Tamil, next came English, Telugu and Sanskrit. Italian, Hindi and Sourashtra were unrepresented, while Marathi was newly represented by a single publication. As usual, religion and philosophy put together occupied the foremost place, but it is a matter for regret that the total number of publications in science and art was still so low as 127 or 4 per cent and showed no perceptible increase over the previous year, while under educational publications coming under the same category there was a positive fall. Further activity in "Politics" was in evidence during the year. Generally speaking, the increased literary output of the year was less than could be wished on lines of material progress and realistic knowledge, and the considerable number of publications in branches of humanistic culture other than religion and philosophy was of a low order relating to detective stories clumsily adapted, "Kavadi-Chindus" or loose pilgrim songs and the like. On the whole, however, there was some rise in the standard of the total literary output and a marked attempt to meet present-day requirements : and the moral tone of the publications was satisfactory. Among the important publications of the year mention may be made of "Palamoli Nanuru," an ancient Tamil classic edited with commentaries by Mr. T. Chelvakesavaraya Mudaliyar, which is the first complete edition of the work and has been accorded the patronage of Government as being a valuable addition to Tamil literature ; "Kavijanasrayemu," an old treatise on Telugu prosody the publication of which for the first time during the year is a literary event of importance ; and the translation into English of a work in French on Dravidian Architecture by G. Jouveau-Dubreuil, a Professor in the College at Pondicherry.

ARTS AND SCIENCES (1917–18)

Government Museum

Visitors

272. During the year there was a fall by over 127,000 in the number of visitors to the Museum which stood at 626,890. It has been customary for Hindus to visit the Museum in large numbers on two festival days in December and January. One of these days was throughout wet during the year. The fall in attendance was partly due to this circumstance and partly to a decrease in the influx of mufassal people to Madras due to reductions in train service and to the raising of passenger fares.

Buildings

The extension on the south side of the building intended for the ethnological exhibits and collection of arms was fast approaching completion.

Demonstrations

From November to March the usual demonstrations to higher class pupils of high schools in Madras City were continued, the total number of pupils who attended these demonstrations having been 1,702 against 2,355 in the previous year. Demonstrations by the Superintendent to teachers in Madras schools were also continued. Nine were given during the year to 179 teachers. Four popular lectures illustrated by lantern slides were delivered by the Superintendent in the Museum theatre and were well attended.

Archæology and art

A catalogue of the copper-plate grants was nearing completion. Several South Indian wood carvings which had been scattered over various sections of the Museum were brought together, arranged and labelled. Many interesting additions were made during the year consisting of fine wood carvings, metal and stone images, old copper-plate grants.

and a collection of pre-historic pottery in a remarkably good state of preservation excavated in the Coimbatore district. As a result of a tour which the Herbarium Keeper made in the Vizagapatam district during the year, additions were made to the economic and botanical sections and to the series of photographs illustrating growing plants and the methods of manufacture of economic products.

Economic and botanical

273. There was a fall both in the number of visitors to the aquarium, which dropped, by over 16,000, to 90,535, and in the entrance fees realized, which fell, by over Rs. 500, to Rs. 3,231.

Marine Aquarium

274. The principal duties of the Meteorologist consisted, as usual, of the publication of the Madras daily weather report and the Presidency rainfall tables. The number of observatories continued to be 25 and the usual annual repairs were executed at ten of these. No observatory was inspected during the year. The number of rain-recording stations also remained the same (496) as in the previous year. Of these 395 are in the Madras Presidency, of which 390, or nearly 99 per cent, were inspected. No inspection reports were received from the States of Travancore and Pudukkōttai. The total cost of the Meteorological department was Rs. 13,187, of which a sum of Rs. 3,642 was spent on mufassal stations and the remainder on the Madras office.

Meteorology

275. The record of solar activity was maintained as usual at Kodaikānal. Spectroheliograms of the sun's disc in calcium light were obtained on about the same number of days as in the previous year and of prominences at the limb on 262 days against 310 days in 1916. The number of days on which photographs of the disc in hydrogen light were secured was also about the same as in the preceding year. The sunspot records showed an increase in the number of new groups recorded, which rose from 278 in 1916 to 365 in 1917. The mean daily area of the prominences also increased from 3·7 square minutes in 1916 to 5·2 square minutes in 1917. The large grating spectrograph was continuously employed in investigations relating to the displacements of the lines in the solar spectrum with reference to those in terrestrial spectra and a large number of spectrum photographs were obtained and measured. These include some excellent plates of the spectrum of Venus with iron arc comparison spectra. A considerable amount of new instrumental construction work was carried out during the year. A continuous registration of earthquake disturbances was made with a Milne Seismometer and 72 earthquakes were recorded. The photographic records and absolute eye observations in the Magnetic Observatory transferred last year to the Meteorological Department from the Survey of India were continued as in former years. At Madras the astronomical observations made for the maintenance of an accurate time service for the whole of India were continued. The firing of the time-gun at Fort St. George gave a slightly improved success, viz., 97 against 96 in the previous year. The semaphore failed both at 1 p.m. and 2 p.m. on two occasions, failed at 1 p.m. but dropped at 2 p.m. on eleven occasions and dropped correctly at 1 p.m. on all other occasions. The 4 p.m. roll of signals was sent and received at the Central Telegraph Office for distribution over India correctly on every day except one.

Astronomy (1917)

Kodaikānal Observatory

Madras Observatory

CHAPTER VIII

ARCHÆOLOGY AND EPIGRAPHY (1917–18)

[*Annual Report of the Archæological Department, Southern Circle, Madras, for the year 1917–18 (G.O. No. 1256, Home (Education), dated the 21st September 1918). Progress Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year 1917–18 (G.O. No. 1172, Home (Education), dated the 6th September 1918)*]

Archæology

276. No excavations were again taken up during the year for want of time. The work involves absence in camp for two or three months at a stretch and cannot be undertaken while important inspections and conservation await attention. The Superintendent spent 146 days on tour and visited eleven districts. Considerable progress was made with the improvements to the roads and pathways to the monuments at Mahabalipuram and the Hampi ruins, the two most important "Show Places" in the Presidency. Two albums containing photographs of all the important monuments at these places were prepared and put in the rest-houses at the Seven Pagodas and at Kamalāpuram under the charge of the respective Public Works Department overseers for the benefit of tourists and visitors. The repairs to Ginjee fort in the South Arcot district, which were considerable owing to the great area of the fort and the number of buildings to be conserved, were approaching completion. Proposals were under consideration for the execution of repairs to certain other important monuments, of which mention may be made of the old Palace at Chandragiri in the Chittoor district, the Amarāvati stūpa in the Guntūr district, the old Portuguese Church at Porto Novo in the South Arcot district and the Jain temple at Danavulapad in the Cuddapah district. Interesting articles, illustrated by photographs and drawings, were published of the Mallikarjuna temple at Srisailam, situated amongst the inaccessible forests of the Nallamalai hills of the Kurnool district and the Kapōtēsvara temple at Chezarla in the Guntūr district, one of the most valuable ancient monuments in the Presidency. A number of photographs of other monuments and antiquities were prepared and published, and as many as twenty-nine applications for photographs were received from the public. Six cases of treasure-trove consisting of metal and stone images received for opinion as to the desirability of Government's acquiring the finds for the Madras Museum were reported upon. Seven additions were made during the year to the standard list of ancient monuments, an equal number already in the list were declared as protected monuments and one was deleted from the list. Out of a sanctioned grant of Rs. 25,000, a sum of Rs. 22,626 was spent on conservation, nearly two-fifths of which was expended on Hampi and Gingee. The establishment charges of the year amounted to Rs. 19,000.

Epigraphy

277. During the year no less than 500 villages in eleven districts of the Presidency and in the French Settlement at Pondicherry were visited. The number of inscriptions copied and examined rose from 668 to 876, the highest on record, and nearly seventy photographs were taken during the field season. Twenty-two copper-plate inscriptions sent by various gentlemen interested in epigraphy were also examined. Part III of volume III of *South Indian Inscriptions* was finally passed for publication. Considerable progress was made with part IV which will complete the volume,

and volume IV was also taken on hand. Some miscellaneous work was also done at the request of the outside public, of which mention may be made of the preparation of a short note on the work accomplished by the Epigraphical department in the Presidency since its inception and of another note on the worship of Sati in Southern India. Two Siva temples in the South Arcot and Tanjore districts which contain a number of interesting inscriptions were recommended for early conservation. No early Pallava inscriptions were discovered during the year. The Eastern and Western Chalukyas, the Eastern Gangas and the Nolamba Pallavas were each represented by a few records. A stone inscription in Kanarese of the Eastern Chalukyas secured in the Vizagapatam district—one of the very few inscriptions in that language in the Telugu country—shows that the later kings of that dynasty now and then favoured or adopted Jainism, the popular religion of the Kanarese country. A special feature of the collection of the copper-plates for the year is that four of them belong to the family of Bhanjas which held its sway over parts of Orissa and of the Ganjām district about the tenth to the thirteenth centuries A.D. The chiefs of this family are now rulers of the Mayurbhanj estates, of the Baud State and of a few other places in Orissa. As usual a large number of Chola inscriptions were copied during the year. Nearly forty of them relate to the period of Rajaraja I (985—1013 A.D.), and some of these prove that both the Pandya country and Ceylon were subject to his sway, that a revenue survey was conducted in his reign and completed in or before the year 1002 A.D. and that during his reign inquiries were made by State officials into the misappropriation of temple funds. The Pandyas are also represented in the year's collection. Two of the inscriptions which come from the Tinnevelly district make mention of an institution peculiar to the Pandya country, viz., the existence of a class of military men corresponding to the "King's Own Regiment" of the present day who were expected to help their king in times of distress. The villagewar epigraphical survey of the Tenkāsi taluk in that district was very fruitful in yielding a very large number of inscriptions of the later Pandyas. The year's collection included also a number of inscriptions of the Vijayanagara kings and of a few minor dynasties. The study of the curious Brahmi cave inscriptions of Southern India was taken up by a scholar from Eastern Bengal who is about to publish a monograph thereon which is expected to throw some fresh light on these hitherto obscure documents. The expenditure of the department during the year amounted to Rs. 22,000.

CHAPTER IX

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

278. *Vide* pages 244 to 246 of the Report on the administration of the Madras Presidency for the year 1911–12.

ECCLESIASTICAL (1917–18)

Church of England

279. The Bishop was summoned by the Most Reverend the Metropolitan to Calcutta in February 1918 on provincial business. Two chaplains were granted leave on medical certificate in India, and the three vacancies caused by the retirement of one senior chaplain and one junior chaplain and by the re-transfer of one senior chaplain to the Diocese of Bombay were filled up during the year; but the death of one senior chaplain at the end of the year created a vacancy on the establishment. Four chaplains and one Indian clergyman were absent from the Diocese on active service in Mesopotamia. One of the temporary chaplains appointed by the Government of India to the Madras Establishment resigned his appointment and another was relieved of his appointment by a regular chaplain. On the 31st March 1918 there were in all 291 clerks in Holy Orders officiating under the licence of the Bishop of Madras and the Bishop in Tinnevelly and Madura against 258 in the previous year. One Indian and one European were ordained priests by the Bishop of Madras, while the Bishop in Tinnevelly and Madura ordained seven deacons and four priests, all of whom were Indians, and the Bishop of Dornakal ordained on behalf of the Bishop of Madras five priests, all Indians. Five clergymen received licences to officiate in the Diocese of Madras during the year, three as chaplains and two as missionary ministers. Eight licences were issued by the Bishop in Tinnevelly and Madura. No churches or cemeteries were consecrated during the year; but the new Railway Church at Rajahmundry was dedicated in honour of St. Giles by the Bishop of Madras on 22nd February 1918. The alms and other devotions of the people offered through clergymen ministering to English congregations during the year amounted to about Rs. 1·69 lakhs.

Voluntary contributions

Church of Scotland

280. The establishment of the Church of Scotland consisted of three chaplains or one less than in the previous year.

STATIONERY (1917–18)

Stationery

281. The value of the stock with the Superintendent of Stationery at the beginning of the year was Rs. 7·17 lakhs (English stores Rs. 4·48 lakhs and Indian stores Rs. 2·69 lakhs) against Rs. 8·09 lakhs (English stores Rs. 5·27 lakhs and Indian stores Rs. 2·82 lakhs) in 1916–17. The decrease was consequent on a fall in receipts during 1916–17. The value of stores received during the year amounted to Rs. 13·22 lakhs (English stores

Rs. 3·61 lakhs and Indian stores Rs. 9·61 lakhs) against Rs. 6·48 lakhs (English stores Rs. 2·39 lakhs and Indian stores Rs. 4·09 lakhs) in 1916–17. The increase noticeable under both the heads is attributable to the larger supplies received from England and from the Calcutta mills on the indents of both 1916–17 and 1917–18: also to the enhanced rates at which articles supplied during 1917–18 were obtained. The value of issues amounted to Rs. 9·80 lakhs (English stores Rs. 3·17 lakhs and Indian stores Rs. 6·63 lakhs) against Rs. 7·39 lakhs (English stores Rs. 3·17 lakhs and Indian stores Rs. 4·22 lakhs) in 1916–17. The increase was due chiefly to the rise in the prices of almost all articles, both European and country-made. The demands of various officers left uncomplied with at the close of the year 1916–17, particularly of war printing paper, owing to the non-receipt of the supplies in time, were met early in 1917–18 and these went to swell the issues of that year. The value of stationery debited to Local and other Funds and of stationery issued on payment amounted to Rs. 28,395 against Rs. 16,066 in 1916–17. The value of the closing balance of stores for the year was Rs. 10·59 lakhs (English stores Rs. 4·93 lakhs and Indian stores Rs. 5·66 lakhs) against Rs. 7·17 lakhs (English stores Rs. 4·48 lakhs and Indian stores Rs. 2·69 lakhs) in 1916–17. The increase is explained by the increase under receipts.

THE GOVERNMENT PRESS (1917–18)

Finance

282. The net receipts exceeded that of the previous year by Rs. 13,912, due chiefly to the sale-proceeds of unserviceable plant and stores. The total expenditure fell, by Rs. 0·58 lakh, to Rs. 4·35 lakhs. The decrease was due mainly to reductions in printing orders, to printing and binding settlement registers in a cheaper form and to smaller purchases of plant and stores.

Publications

283. A sum of Rs. 49,461, against Rs. 38,457 in the previous year, was realized by the sales of Acts and books including Gazettes, Law Reports and Government Orders. The sales by commission agents rose by Rs. 309 to Rs. 7,022. There was a decrease of Rs. 24,598 in the value of publications issued free, which was due to the revision of distribution lists and to the supply of less expensive publications.

Printing and binding

284. The number of standard pages printed during the year including the pages set on the Linotype machines was 242,597 against 274,919 in the previous year, while the average cost per page in the Madras presses rose from Rs. 1-0-6 to Rs. 1-1-7. The number of impressions was 99,825,740 against 118,578,300 in 1916–17, the decrease being due mainly to more economical methods and to smaller demands for forms. The average cost per 1,000 impressions in the Madras Presses was As. 14–9. The total debits against binding for all the presses amounted to Rs. 0·92 lakh, a decrease of Rs. 28,595 due chiefly to a fall in indents and to the adoption of cheaper methods in the binding of books.

Miscellaneous

285. An expenditure of Rs. 9,161 was incurred on additions to the plant. The output of the type foundry was 42,275 lb. of type, 9,094 lb. of stereos and electros, 25 punches and 82 matrices: and the expenditure fell from Rs. 0·46 lakh to Rs. 0·40 lakh. Types and other materials to the value of Rs. 609 were supplied to District and Jail Presses against Rs. 5,445 in the previous year. The fall was due to most of these presses having been closed during the year and to the District Gazettes having been issued from Madras in consequence. The number of copies of forms indented for during the year was nearly 110 millions or 23 millions less than in 1916–17.

THE CHEMICAL EXAMINER'S DEPARTMENT (1917)

[*G.O. No. 183, Local and Municipal (Medical), dated the 30th April 1918; Statistics of British India, Part VI, Administrative and Judicial—Medico-legal Investigations*]

Medico-legal investigations

286. The total number of cases (2,154) investigated by the Chemical Examiner was almost the same as in the previous year; but the nature of these cases varied. There was a slight increase in medico-legal cases and a slight decrease in general analyses. Cases of suspected human poisoning numbered 211 against 197 in the previous year; and cases of suspected animal poisoning stood at 78 against 88; and 49 animals were reported to have been killed. The percentages of detections were 41·2 against 46·7 in the former class of cases and 61·5 against 59 in the latter class. The principal poisons detected in the cases of human poisoning were arsenic and mercury and their compounds and aconite and opium. Convictions were obtained in three non-fatal cases and six fatal cases. Arsenic and its compounds and thevetin were the principal poisons detected in the cases of animal poisoning. There were 280 cases investigated for blood or seminal stains and the number of articles examined was 1,008. The percentage of detections was 73·3 against 71·5 in the previous year. Five hundred and fifty-six specimens of stains relating to 210 cases were sent to the Imperial Serologist and 499 of these were found to be due to human blood. The total number of articles examined was 1,565 against 1,582 in the previous year, the number of analyses undertaken for private parties being 129. The bulk of the other work was for the Customs and Commissariat departments.

Poisoning

Stains

General analyses

CHARITABLE INSTITUTIONS (1917–18)

General statistics

287. There were 3,229 charitable institutions in the Presidency, excluding dispensaries, with an income of Rs. 14·74 lakhs, 12 garces of paddy and 326 muras of rice. Of these institutions 2,247 were maintained entirely by subscriptions and donations from the general public and endowments in land and money, the total receipts from these sources amounting to Rs. 7·26 lakhs. The Government supported 275 institutions at a cost of Rs. 1·52 lakhs and 95 were maintained partly by Government and partly by the public at a cost of Rs. 2·24 lakhs. The maintenance of the remaining 612 institutions, costing about Rs. 3·70 lakhs, devolved wholly or in part on local bodies. The funds of 1,990 institutions were devoted to the provision of accommodation, cooked food and other supplies to travellers. Of these 1,203 were exclusively for Hindus, 37 for Muhammadans and 2 for Europeans and Eurasians, while the remaining 748 were not restricted to any particular class. For the relief of paupers 416 institutions were maintained, of which 226 were restricted to Hindus, 11 to Muhammadans and 3 to Europeans and Eurasians, while the remaining 176 were open to members of all classes and creeds. There were 746 institutions exclusively devoted to giving help to Brahmans and Byragis. There were also 4 institutions for orphans, 3 for Rajput boys and girls and 4 for the support of the blind, the deaf and lepers. The total number of persons aided during the year at all the above charitable institutions was 11,691,229.

Monegar Choultry

The average daily number of inmates in the Monegar Choultry was 59·91 against 49·74 and the daily average cost of diet per pauper was As. 2–8 against As. 2–4 in the previous year. In the chronic wards the average daily number was 27·99 against 31·15 and the average cost of a diet was As. 4–10 against As. 4–1 in the previous year. The balance to the credit of the charity on the 31st March 1918 was Rs. 5,974.

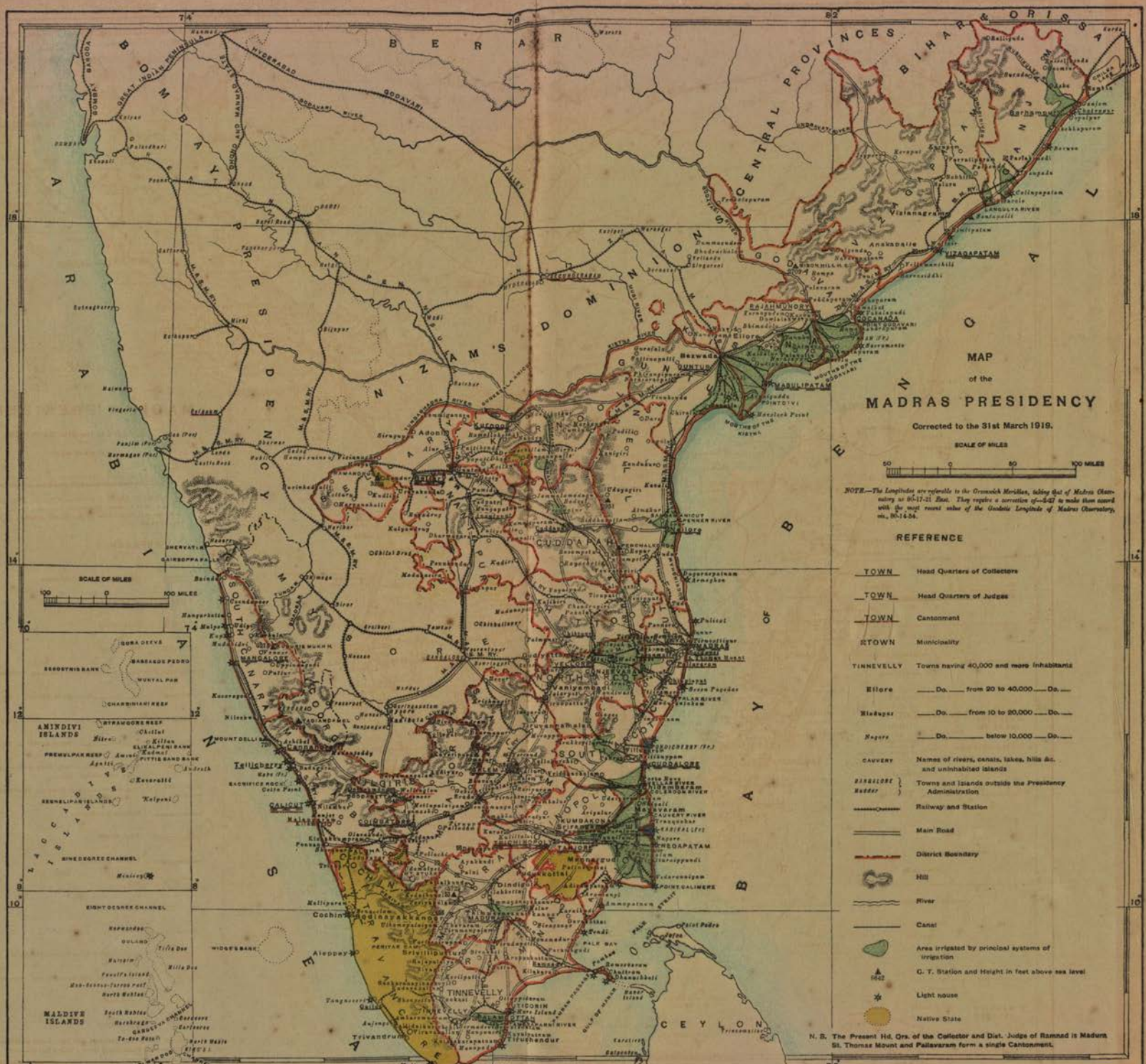
The Raja of Venkatagiri's Choultry

The daily average number of in-door paupers in the Raja of Venkatagiri's Choultry was 10·32 and of out-door paupers (receiving $\frac{1}{4}$ measure or $\frac{3}{4}$ lb. of raw rice daily) was 102. The corresponding figures for the previous year were 15·97 and 103. The daily average cost of diet of an in-door

pauper was As. 2-9 and of an out-door pauper 10 pies, as against As. 2-6 and 10 pies in the previous year. On the 31st March 1918, this institution had a balance of Rs. 989. The receipts of the Triplicane Langerkhana including an opening balance of Rs. 135-11-8 amounted to Rs. 5,178-3-8. The daily average number of paupers who received help from the institution was 184 as compared with 203 in the preceding year. Triplicane Langerkhana

MUHAMMADANS IN THE SERVICE OF GOVERNMENT (1917-18)

288. There were 8,067 Muhammadans in the superior service of Government on the 1st April 1918, or 288 less than the number employed in the previous year. The number of Muhammadans admitted into the service during the year, excluding those who enlisted as police constables (423), was 46 of whom 16 joined the establishments of civil and criminal courts in the mufassal and 13 entered the Police department as sub-inspectors and clerks. Twelve persons held posts with an annual salary of Rs. 5,000 and above, 40 were in receipt of salaries ranging from Rs. 2,500 to Rs. 5,000, 104 from Rs. 1,000 to Rs. 2,500, 254 from Rs. 500 to Rs. 1,000, and 658 from Rs. 250 to Rs. 500. The number earning from Rs. 120 to Rs. 250 fell from 7,192 to 6,999, and 15 drew Rs. 120 and less against 47 in the previous year. There were 6,459 Muhammadans employed in the Police department, 479 in Courts of Law, 282 in the Land Revenue, 218 in the Education department, 147 in Forest, 115 in the Registration department and 107 in Salt. Other departments employed less than a hundred in each. The percentage of Muhammadans to the total population of the Presidency was only 6·6, but nearly 14 per cent of the posts in the superior service were held by them.



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OF THE

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FOR THE YEAR

1918-19

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CONTENTS

PAGE

PREFATORY NOTE ... vii

PART I

GENERAL SUMMARY ... ix

PART II

THE REPORT

CHAPTER I—PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PARA. PAGE

1 Physical features of the country, area, climate and chief staples ... 1

POLITICAL

PARAS. PAGE

2 Historical summary ... 1

3 Form of administration ... 1

4 Character of land tenures ... 1

5 System of survey ... 1

6 System of settlements ... 1

7 Civil divisions of the British territory ... 2

8 Details of the census of 1911—tribes and languages ... 2

9 **Changes in the Administration** ... 2

10 **The Madras War Fund** ... 2

11 **His Excellency the Governor's Tours** ... 2

Relations with Tributary States

TRAVANCORE STATE

12 General and political ... 4
13 Revenue and finance ... 4
14 Protection and legislation ... 4
15 Production and distribution ... 5
16 Vital statistics and medical services ... 6
17 Education ... 6

COCHIN STATE

18 General and political ... 7
19 Revenue and finance ... 7
20 Protection and legislation ... 7
21 Production and distribution ... 8
22 Vital statistics and medical services ... 9
23 Education ... 9

PUDUKKOTTAI STATE

24 General and political ... 9
25 Revenue and finance ... 10
26 Production and distribution ... 10
27 Protection and legislation ... 10
28 Vital statistics and medical services ... 11
29 Education ... 11

BANGANAPALLE STATE

30 General and political ... 11
31 Revenue and finance ... 12
32 Protection and legislation ... 12
33 Vital statistics and medical services ... 12
34 Education ... 12

SANDUR STATE

35 General and political ... 13
36 Revenue and finance ... 13
37 Protection ... 13
38 Production and distribution ... 13
39 Vital statistics and medical services ... 14
40 Education ... 14

41 **Condition of the People** ... 14

42 **Political Pensions** ... 15

CHAPTER II—ADMINISTRATION OF THE LAND

Realization of land revenue

PARAS. PAGE

43 Sources of land revenue 16
44 Collections 17
45 Coercive processes 17
46 Transfer of registration 17
47 Loans and advances 18

Surveys

48 Operations 18
49 Parties 18
50 Central Office 19
51 Outturn and outlay 19
52 Finance 19

Settlements

53 Parties 20
54 Districts 20
55 Registers 21
56 Finance 21

Land records

PARAS. PAGE

57 General 22
58 Maintenance 22
59 Training of staff 22
60 **Waste lands** 23
61 **Government estates** 23

Wards' estates

62 Estates under management 23
63 Finance 23
64 Works 24
65 Debts 24
66 Education of the wards 25
67 Miscellaneous 25

Revenue and rent-paying classes

68 Revenue-paying classes 25
69 Rent-paying classes 25

CHAPTER III—PROTECTION

70 Legislating authority **26**

Course of legislation

71 Legislative Council 26
72 Acts and Bills 26
73 Government of India 27

Police

74 Administrative changes 27
75 The police force 27
76 Village police 28
77 Armed reserves 28
78 Railway police 29
79 Statistics of crime 29
80 Detection and prevention of crime ... 30
81 Criminal Investigation department ... 30
82 Finance 31

Criminal justice

83 General 31
84 Original cases 31
85 Appeals 32
86 Reference and revision 32
87 The jury system 32
88 Miscellaneous 33

Prisons

89 Accommodation 33
90 Prisoners of all classes 34
91 Convicts 34
92 Conduct 34
93 Vital statistics 35
94 Finance 35

Civil justice

95 General 35
96 Litigation 36
97 Courts of original jurisdiction 36
98 Appellate courts 37
99 Insolvency 38
100 Miscellaneous 38
101 Finance 38

Registration and companies

102 Registration 38
103 Registered companies 39
104 Notaries Public 40

Co-operative societies

105 General 41
106 Working of societies 41
107 Miscellaneous 43

Local Board administration

108 General 43
109 Finance—Receipts 44
110 Do. Expenditure 44
111 Railways 45

Municipal administration—mufassal

112 General 45
113 Finance—Receipts 46
114 Do. Expenditure 46
115 Debt 46

Municipal administration—City of Madras

116 Finance 47
117 Works 47
118 Education 48
119 Sanitation and medical service ... 48
120 Miscellaneous 49
121 **Military (The Indian Defence Force)** 49

Marine

122–124 Madras Port Trust 49
125–126 Minor ports 51

Mortality from wild animals and snakes

127 Mortality 51
128 Rewards 52

Miscellaneous

129 Arms, explosives and sulphur 52

CHAPTER IV—PRODUCTION AND DISTRIBUTION

PARAS. PAGE

Agriculture

130 General 53
131 Agricultural research and experiments ... 53
132 Scientific research and experiments ... 55
133 Aid to the public 56
134 Agricultural associations 57
135 Agricultural engineering 57
136 Finance 57
137 Civil Veterinary department 57

Weather and crops

138 Rainfall 58
139 Crops 59

Horticulture

140 Government Botanic Gardens and Parks, the Nilgiris 59
141 The Agri-Horticultural Society, Madras ... 60
142 Government cinchona plantations ... 60

Fisheries

143 General 61
144 West Coast section 62
145 Piscicultural work 62
146 Fishing experiments 63
147 Marine work 63
148 Socio-economic work 63

Forests

149 Area 64
150 Communications and buildings 64
151 Protection of forests 64
152 Sylviculture 65
153 Exploitation 65
154 Finance 66
155 Research and experiments 66
156 Miscellaneous 66
157 Forest College, Coimbatore 67

Mines

158 Output 67
159 General condition of the employees ... 67

PARAS. PAGE

Manufactures

160 General 68
161 Factories 69
162 The department of industries ... 69

Sea-borne Trade

163 General summary 71
164 Customs revenue 71
165 Foreign imports 71
166 Foreign exports 73
167 Government transactions 76
168 Shipping 76
169 General effects of the war 76
170 Trade according to countries 76
171 Coasting trade 76
172 Ports 77
173 Miscellaneous 77

Public Works

GENERAL

174 Administrative changes 77
175 Chief Engineer's office 78

CIVIL WORKS

176 Works in progress 78
177 Workshops 79

RAILWAYS

178 Development 80
179 Accidents 80
180 Miscellaneous 80
181 TRAMWAYS 80
182 CANALS 81

IRRIGATION

183 Gross expenditure and revenue... ... 81
184 Class I, Major works 81
185 Class II, Minor works and Navigation... 82
186 Class III works 82
187 Class IV, Agricultural works 82
188 Investigation of projects 82
189 Miscellaneous 83
190 Ayacut maps 83

CHAPTER V—REVENUE AND FINANCE

Revenue and Finance other than Municipal

(*a*) GROSS REVENUE

191 Revenue and expenditure 84
192 Surplus revenue 85
193 Cash balances 85

(*b*) IMPERIAL REVENUE AND FINANCE

194 General 86
195 Land revenue 86
196 Customs 86
197 Opium 86
198 Salt 86
199 Excise (Abkāri) 87
200 Stamps 87
201 Income-tax (excluding super-tax) ... 87
202 Super-tax 88
203 Other Imperial receipts 88
204 Transfers between Imperial and Provincial 88
205 Expenditure on famine relief 88
206 Other Imperial expenditure 88
207 Capital outlay on State Railways and Irrigation works not charged to Revenue ... 88
208 Imperial loans 88

(*c*) REVENUE AND FINANCE OTHER THAN IMPERIAL.

209 Provincial revenues 89
210 Land revenue 89
211 Stamps, Excise and Income-tax 89
212 Forests 89
213 Registration 89
214 Canal revenue 89
215 Other Provincial receipts 89
216 Expenditure on famine relief 90
217 Other Provincial expenditure 90
218 Provincial loans 90
219 Local funds 90
220 **Municipal revenues** 92

Excise Administration

221 Administrative changes 92
222 Licensing Board and Advisory Committees 93
223 Temperance measures 93
224 Country spirits 93
225 Toddy 94
226 Foreign liquor 94
227 Finance 94
228 Opium and intoxicating drugs 94
229 Offences 94

CHAPTER VI—VITAL STATISTICS AND MEDICAL SERVICES

PARAS.		PAGE
230	**Details of census**	**95**
	Births and deaths	
231	Population	95
232	Registration of vital statistics	95
233	Chief diseases	96
234	Europeans and Eurasians	97
	Emigration and immigration	
235	Regulated	97
236	Non-regulated	98
	Medical relief	
237	General	98
238	Staff	98
239	Medical institutions	98
240	Relief	99
241	Finance	99
242	Madras Medical College	100
243	Medical schools	100
244	**The Pasteur Institute, Coonoor** ..	101
245	**Lunatic asylums**	101
	Sanitation	
246	Sanitary Board	102
247	Sanitary Commissioner	102
248	Sanitary Engineer	103
249	**Vaccination**	103

CHAPTER VII—INSTRUCTION

250	**General system of public instruction**	**104**
	Education	
251	Administrative events of the year ...	104
252	General statistics	104
253	University and collegiate education ...	104
254	Secondary education	105
255	Elementary education	105
256	Special education	105
257	Female education	106
258	European education	106
259	Education of Muhammadans	106
260	Education of backward classes and others	106
261	Finance	107
262	**Reformatory School, Chingleput** ...	107
	Miscellaneous	
263	Government examinations	108
264	Lawrence Memorial School	109
265	School of Arts, Madras	109
266	**Literary Societies**	**109**
	Literature and the Press	
267	Public Libraries	109
268	The Madras Record Office	110
269	Periodicals	110
270	Registration of books	110
	Arts and sciences	
271	Government Museum	111
272	Marine Aquarium	112
273	Meteorology	112
274	Astronomy	112

CHAPTER VIII—ARCHÆOLOGY AND EPIGRAPHY

275	Archæology	114
276	Epigraphy	114

CHAPTER IX—MISCELLANEOUS

277	**Ecclesiastical jurisdiction**	**116**
	Ecclesiastical	
278	Church of England	116
279	Church of Scotland	116
280	**Stationery**	117
	The Government Press	
281	Finance	117
282	Publications	117
283	Printing and binding	117
284	Miscellaneous	117
285	**The Chemical Examiner's department**	118
286	**Charitable institutions**	118
287	**Muhammadans in the service of Government**	119

PREFATORY NOTE

IN compliance with the orders of the Government of India, Part I of this publication—the "General Summary"—deals with the calendar year 1919 and Part II—the main report—with the official year 1918–19.

PART I

GENERAL SUMMARY

Political situation.—1. The tendency towards political subdivision noticed in the last Administration Report was continued, and as a result the political activities of the Presidency became ever increasingly complex in character. On the one hand appeared the Labour Union, with its attendant Advisory Board, and on the other the several ramifications of the Home Rule Party. One section of that party has become decidedly more restrained in its utterances, especially since the introduction of the new Government of India Bill in Parliament, while the more extreme members have maintained their irreconcilable attitude. The various deputations which went to England to impress on Parliament and the public their views on the reforms necessary have since their return emphatically asserted their differences of opinion, but it remains for the coming year to show which has the greatest following. As a natural consequence of the events of the year Muhammadan sympathies were intrigued, and the community were more prominent in political affairs than usual. It is thus a task of great difficulty to compress an account of political movements into an intelligible summary; but it may be recorded without unfairness that politics remained largely the province of publicists and agitators; in the Presidency town a certain degree of interest, especially in the labour and strike campaigns, was naturally awakened, but reports indicate that in the mufassal the overwhelming majority of the people took no more interest in political matters, whether Indian or extraneous, than in previous years.

Hindu agitation naturally turned mainly on the Rowlatt Bills and their sequel of Passive Resistance and, later in the year, on the Reform Bill and the proceedings of the Punjab Commission. Such popular excitement as much outcry over the Rowlatt Bills could engender can be proved to have had its source mainly in misapprehensions as to the purpose of these measures: neither this nor the principle of the ensuing Satyagraha movement was ever very closely followed or clearly understood in this Presidency and as a result such demonstrations as were successfully organized were of an artificial character. Public attention was presently deflected from the movement to the Reforms Bill, which was received by the various political parties in the spirit to be expected from their previous declarations of policy. It created little popular excitement: indeed, one of the lessons of 1919 for the political agitator would seem to be that as a means of arousing the more demonstrative forms of popular enthusiasm the political meeting has ceased to be effective.

All through the year under review the Muhammadan attitude in respect of the Peace terms to be imposed on Turkey was the cause of some anxiety. The events in Afghanistan, on the other hand, attracted little attention, and such opinions as were expressed by the Muhammadan community were mainly condemnatory of the Amir and his folly. In spite of a number of rather clumsy attempts at agitation

and a few sporadic incendiary utterances no spirit of disloyalty was made manifest. The religious aspect of the Turkish question has been constantly emphasized and there are evidences that the more enlightened portion of the Muhammadan community are likely to take a thoroughly sane and reasonable view. The unrest, such as it was, reached a climax in the so-called Khalifat day on 17th October ; the occasion was marked by no disloyal preaching or disorderly conduct, but rather by a prevailing uncertainty as to the cause of the proceedings and a vagueness as to future policy shared apparently by the leaders themselves. The movement elicited little enthusiasm in the mufassal and in one district the proceedings were actually organized not by the Muhammadans but by that section of the extremist Hindus who have throughout been bidding by sympathetic utterances on the Turkish question for the establishment of a Hindu-Muslim *entente*.

Finance.—2. The finances of the Presidency during the year 1919 were naturally conditioned by two main factors, the cessation of hostilities on the one hand and on the other the unfavourable season everywhere experienced. Thus the revival of trade and litigation led to an increase of the revenue from stamps, the restitution of more stable conditions to a similar rise in excise receipts, while the removal of the control over tanning materials enhanced the takings of the Forest department. Land Revenue naturally fell with the bad season and the expenses debitable to this head were swelled in turn by the grant of high-price allowances and by the famine operations undertaken in Ganjām. Income-tax receipts showed a very large advance indeed, but this was due almost entirely to arrear collections ; it is as yet too early to estimate either the loss consequent on the raising of the taxable limit to Rs. 2,000 or the gain to be anticipated from the Excess Profits Duty.

Agriculture.—3. Increasing interest has of late been directed to the work of this department and the value of experimental work on specialized lines has been recognized with the result that certain additions to the staff in the Chemical and Mycological sections have been made. The passing of the Madras Agricultural Pests and Diseases Act has placed a valuable weapon in the hands of the department and its utility is already being tested in the case of Cambodia cotton which has suffered very seriously from worm, the direct result of over-production and bad farming methods. Experimental and demonstration work has been vigorously pursued in the spheres of coconut-growing, sugarcane and paddy-breeding, sheep-farming and planting industries. The contemplated transfer of the Engineering section to the Department of Industries should free the hands of the Agricultural Engineer from a volume of labour not strictly germane to the department, while another interesting development is the initiation of a campaign of agricultural education on comprehensive lines.

Fisheries.—4. In the Fisheries department the outstanding feature of the year has been the introduction of an educational scheme aiming at the provision of specialized primary education for the fisher communities. Co-operative ideas were promulgated amongst these somewhat backward peoples, and anti-malarial operations made some headway. The industrial work of the department was most successful and showed a large profit.

Forests.—5. In June of the year under review the control of the department was removed from the Board of Revenue and placed directly under the Chief Conservator of Forests. It is as yet, however, too early to estimate the effects of this notable change. The department continued to suffer from a paucity of officers, but was able to maintain its supplies of hay and tan stuffs to the military. The policy of abandoning isolated and valueless reserves and their distribution in the form of land grants to ex-sepoys and members of the depressed communities was continued, and efforts were made to perfect the communal system of management of grazing areas, many new panchayats being formed during the year. The lesson of the war for this department was the extremely undeveloped and inaccessible condition of its valuable resources and this year the appointment has been made of a Forest Utilization Officer who will advise in such matters.

Trade.—6. The dislocation of trade during the war was enormous and at present only a state of gradual transition to normal conditions is to be observed. Even such improvement as would naturally have arisen has been largely discounted by the abnormal position of exchange and the consequent set-back to business of all sorts. The coasting trade, whose recrudescence was a result of the war, has of course suffered severely; freights for timber, for instance, have fallen from Rs. 120 per ton in 1918 to the low figure of Rs. 30. Super-dues on exports and imports were still necessary to maintain the solvency of the Port of Madras in view of the depleted volume of trade. The shortage on land naturally affected the movement of products by sea; thus an enormous and unprecedented quantity of Burma rice was imported while no Indian rice was exported owing to the prohibition. There was a notable decrease in imports of sugar owing to the retiral from the market of the Bombay buyers; the general increase of the value of sea-borne trade over the figures for 1918 was as much as forty per cent. An interesting feature of the year was the persistent smuggling of gold from the Straits Settlements in contravention of the prohibition—a business rendered extremely profitable by the prevailing rates of exchange.

Industries.—7. The rise in the price of machinery and the restriction on imports combined with the scarcity of liquid fuel to retard any advance in the mechanical engineering branch. A tendency has been observed, however, to multiply the installation of small rice-milling and other plants beyond the limits of economic conditions, and the energies of the department may be devoted to the centralization or combination of such plants rather than to further installations. So far as the unsatisfactory nature of the prevailing conditions have permitted, the activities of the department have been vigorous and comprehensive, and the financial results have been everywhere favourable, the soapworks presenting a specially promising record.

Co-operation.—8. There was a large expansion of non-credit societies and a steady development of non-credit work, while a noteworthy feature was the invasion of the Agency tracts by co-operative methods, three societies being registered. There was a very marked rise in the number of Panchamas admitted to agricultural societies. An interesting experiment was made by two newly-formed societies on the lines of trading

unions. These will combine both credit societies and individuals in their membership, and in addition to joint purchase and sale propose to undertake the co-operative preparation of their members' produce for market. The progress made in the conversion of the Provincial Bank into a genuine federation was not very rapid, and there is undoubtedly still a very wide field for general expansion in this department.

Civil Supplies.—9. The working of this temporary department was greatly complicated during the year by the widespread failure of the harvest which amounted in one district to actual famine. Supplies of Burma rice had to be controlled, and, with the failure of supplies from Bihar and Orissa, Bengal had to be indented upon for contributions. Rice, gram, pulses, sugar, wheat and kerosene oil were controlled, the shortage in the last-mentioned commodity being at one time very serious ; but these restrictions have all been abolished with the exception of those placed on rice and on the inter-provincial movements of wheat and gram. The relations, for purposes of control, between Madras and the States of Mysore, Hyderabad and Cochin gave rise to some difficulty, but satisfactory compromises were eventually reached in all cases.

Public Works.—10. The slackening of the financial stringency has naturally led to a considerable increase in the activities of the department, which have not however reached the pre-war level. The prices of iron pipes and similar materials show an increase in pounds sterling over pre-war rates of no less than 300 per cent, but the present favourable rate of exchange reduces this to a real increase of 200 per cent. The chief work now before the department is the Cauvery Reservoir project estimated to cost Rs. 400 lakhs ; this is now with the Government of India. During the year the works in progress included the new Engineering College buildings in Madras, hospitals in Madras and Vizagapatam, and an important bridge in Kurnool ; among those in contemplation were an Engineering School at Vizagapatam and a new General Hospital and Medical College at Madras. The attention of the department was also directed to a wide scheme for the reorganization of headquarters office accommodation at Madras and the provision of residential quarters for officers stationed in that city, where the rise in rents and the shortage of bungalows has rendered the housing problem of the first magnitude. A number of drainage and water-supply schemes were also taken up.

Police.—11. The outstanding feature of the year was the introduction of the time scale of pay for officers of the Imperial service. The problem of recruitment was throughout the cause of grave anxiety, not less in the constable grade than in that of the European Sergeants and the Sub-Inspectors and Sergeants of the City Force ; in the case of constables the difficulty has been to some extent met by the grant of a war allowance and the institution in one district of a new intermediate class of officer to be known as 'Naik.' The problem, however, remains of grave moment and is not likely to diminish in weight. Rewards were more freely disbursed and there was a gratifying increase in co-operation on the part of the public. The economic position in many parts of the mufassal became acute and this led naturally to an increase of crime, especially in the fields of house-breaking and theft. The fact that the majority of these offences were traced to casual offenders would

seem to argue that, with the return of normal economic conditions, this false augmentation of the crime-volume will vanish. Political agitation was on the whole moderate and the Satyagraha period resulted in no actual disturbance. There was some activity, however, in Press Act administration. The Dasara and Muharram synchronization produced no violent outbreak though there was a subsequent *émeute* between the Hindus and Muhammadans of Nellore which was accompanied by fatalities. Early in the year, a formidable Mappilla outbreak occurred in Malabar and resulted in the usual extermination of the fanatics after the commission of several murders. The outbreak was distinguished by the employment by the preventive force of motor transport and a 2·5 inch gun, and the unprecedented promptitude with which the force was rushed to the spot and the stronghold of the fanatics reduced should act as a most salutary deterrent on the commission of future outbreaks of this type.

Civil and Criminal Justice.—12. The year was marked by a large increase in the number of permanent courts and by the establishment of the permanent strength of the High Court at twelve Judges. The cessation of hostilities gave a natural impulse to litigation and the figures of institutions make an upward leap of about 20 per cent. There was a marked increase in sessions crime doubtless attributable to the causes indicated above.

Jails.—13. The large increase in jail population coupled with the withdrawal from the market of the Military department as a buyer of jail products brought into prominence the question of jail labour, and the local Government have impressed on all consuming departments the necessity of indenting on this source of supply of goods. Vital statistics were disquieting, but much of their effect is attributable to the ravages of the influenza pandemic and the generally reduced physical condition of admissions which was due to the prevailing high prices. The concentration of tuberculous prisoners at a centre is under contemplation. The Tanjore Jail for Adolescents has now been openly styled the Tanjore Borstal Institution; but, so long as the present lack of organizations for after-care continues, the Borstal treatment attempted or given can only be half complete. The prospects of the establishment of such organizations, which must clearly depend on non-official energy, are not very encouraging.

Public Health.—14. Against a low birth-rate is to be set a decrease in the death-rate—though this is rendered somewhat illusory by the enormous death-rate caused by the influenza pandemic with which it is compared—and a fall in infant mortality. Cholera and smallpox death-rates have declined slightly and that of plague markedly. Vaccination work remains unsatisfactory. The shortage of medical officers of all grades has been again very seriously felt.

Legislation.—15. The local Legislative Council was reconstituted in August on the expiry of the term of the present additional members. Opportunity was taken to increase from 8 to 12 the number of nominated non-official members, there being thus 33 non-official members and 10 official members of the Council. An interesting feature of the election was the unusual success of non-Brahman candidates who wrested several

seats from the Brahman community. An innovation in the present Council is the nomination of a Panchama representative.

The new Act for the Municipal Administration of Madras City was passed in March and brought into force in October and a Bill in regard to Mufassal Municipalities has also been introduced.

Education.—16. The year was marked by the complete revision of the University Regulations, and a University Students' Club was started. Female education received special attention throughout. A very distinct forward step in the interests of Panchama education was made by the issue of an order requiring schools under public management to be situated in localities accessible to all communities and directing the removal of such schools from rented buildings whose owners object to the admission of Panchama children.

Publications during the year were mostly of a political nature and possess only an ephemeral value; but some works of a more enduring character were produced in the Telugu language. Publications in the vernacular tended however to decline in number and this decline was marked in the case of Telugu.

General Condition.—17. Until the copious rains of late September made certain the harvest the earlier rains had rendered probable, scarcity was great, prices abnormal, and economic conditions exceedingly strained. The prevalent distress amounted to actual famine only in certain taluks of the Ganjām district, but for a time several other areas were threatened and there can be little doubt that the period will live in popular memory as a time of poverty and misery. Under these conditions it was a task of insuperable difficulty to bring home to the mind of the masses the fact of the victorious termination of hostilities and there is little doubt that the progress of the peace negotiations was but dimly apprehended. The political excitements of the year in turn associated themselves with matters beyond the understanding of the common people, who were therefore little exercised by their careers; the wildness of the prevailing misconceptions with regard to the Rowlatt Bills and Satyagraha would be ludicrous were it not pathetically indicative of the real attitude and condition of the popular mind. The closing weeks of the year were marked by the initiation by the local Government of a vigorous forward policy, embracing the amelioration of the depressed classes in all their branches with the co-ordination of labour and its release from the bonds which tradition has imposed upon its progress. The problem of intemperance again received the attention of Government and the policy of closing liquor shops, wherever possible, was continued. The progress of non-official activities in the fields of reform, whether in the spheres of temperance, education, or prisoners' aid, cannot be described as very rapid; but such manifestations as have come to notice have received every encouragement, and a machinery is being established by which it is hoped to hasten and secure the co-ordination of non-official and official effort.

PART II

THE REPORT

CHAPTER I

PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES

1. *Vide* pages 1 to 10 of the Report on the administration of the Madras Presidency for the year 1911–12.

POLITICAL

HISTORICAL SUMMARY

2. *Vide* pages 11 to 33 of the Report on the administration of the Madras Presidency for the year 1911–12.

FORM OF ADMINISTRATION

3. *Vide* pages 34 to 54 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHARACTER OF LAND TENURES

4. *Vide* pages 55 to 60 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SURVEY

5. *Vide* pages 61 to 72 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SETTLEMENTS

6. *Vide* pages 73 to 86 of the Report on the administration of the Madras Presidency for the year 1911–12.

CIVIL DIVISIONS OF THE BRITISH TERRITORY

7. *Vide* pages 87 to 100 of the Report on the administration of the Madras Presidency for the year 1911–12.

DETAILS OF THE CENSUS OF 1911—TRIBES AND LANGUAGES

8. *Vide* pages 101 to 104 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHANGES IN THE ADMINISTRATION (1918–19)

9. In November 1918 the Hon'ble Mr. H. F. W. Gillman, C.S.I., Member of Council, was deputed on special duty as Member of the Committee on Division of Functions and the Hon'ble Mr. L. Davidson, C.S.I., was appointed Temporary Member of Council to fill this vacancy with effect from the 2nd of that month. Mr. Gillman died at Simla on the 23rd November 1918 and Mr. Davidson was appointed permanent Member of Council with effect from the 10th February 1919. His Excellency the Right Hon'ble John, *Baron* Pentland of Lyth, P.C., G.C.S.I., G.C.I.E., vacated the office of Governor of Fort St. George and its Dependencies on the 29th March 1919, on which date the Hon'ble Sir Alexander Cardew, K.C.S.I., Senior Member of Council, assumed temporary charge of it, pending the arrival of the Right Hon'ble *Baron* Willingdon of Ratton, G.C.S.I., G.C.I.E., G.B.E., the Governor-Designate. The Hon'ble Mr. C. G. Todhunter was appointed Temporary Member of Council to fill the vacancy caused by the Hon'ble Sir Alexander Cardew's assumption of charge of the Governorship.

THE MADRAS WAR FUND

10. Since the 1st June 1918 the Madras War Fund continued its activities in various directions. It assumed new responsibilities and the demands on its resources and on the activities of the Ladies' Depot centres throughout the Presidency remained considerable up to the end of June 1919. After the cessation of hostilities the fund supplied Red Cross comforts to the troops in Mesopotamia and to all the military station hospitals and convalescent depots in this Presidency. With the unanimous consent of the subscribers the fund contributed Rs. 5 lakhs to the Imperial Indian Relief Fund, and the balance in hand was placed at the disposal of its new President, His Excellency Lord Willingdon. On the 12th June 1919 His Excellency held a meeting of the subscribers where it was resolved to hand over a sum of Rs. 4 lakhs to a "Post-War Fund Committee" with Her Excellency Lady Willingdon as President. By the 30th June most of the liabilities of the fund had been discharged and the work of the various Ladies' Depot centres throughout the Presidency ceased. All the Red Cross materials presented to the military station hospitals in the Presidency were handed over to the General Officer Commanding 9th Division as a free gift from the fund which is now closed. The total sum contributed by the fund from the beginning of the war up to the 31st March 1919 was Rs. 74·63 lakhs.

HIS EXCELLENCY THE GOVERNOR'S TOURS

11. In July 1918 His Excellency visited Coimbatore in connexion with the annual Agricultural Conference held there under the auspices of the Madras Agricultural Students' Union. On the 11th July he opened the Conference and attended its second sessions the next day. From Coimbatore His Excellency motored to Palayakottai to visit the

cattle farm of the Pattagar, which is one of the most important breeding stations in South India. He also attended the concluding function in connexion with the Agricultural College, viz., the annual sports held on the grounds of the college on the 13th July. While in Coimbatore he visited the Forest College, the Gass Museum and the Central Jail and presided over the annual meeting of the Coimbatore Branch of the National Indian Association. On his way to Madras for the August meeting of the Legislative Council, His Excellency visited Calicut and Vellore, the headquarters of two of the most important recruiting districts in the Presidency. Leaving Ootacamund on the 8th August he reached Calicut the next day, held a Recruiting Conference there, inspected recruiting parties, presided at a public war meeting and received deputations from the District Emergency Committee and the Himayath-ul-Islam Sabha and an address from the Malabar Muhammadan Educational Association. He also inspected the shipbuilding industry at Beypore and Calicut. At the latter place he met a number of ship-building merchants and others interested in the industry and discussed with them measures for stimulating it. Leaving Calicut on the 11th August, His Excellency arrived the next day at Vellore where he presided at a Recruiting Conference, saw the pensioned native officers of the Indian Army, and opened the Cobb Memorial Hall of the Voorhees' College and the new Women's Mission Medical School. His Excellency then proceeded to Madras and after the Legislative Council meeting he visited Bellary, Anantapur, Bangalore, Hosur and Kollegal. He arrived at Bellary on the 22nd August, held a Recruiting Conference for the Ceded Districts and presided at a War Loan meeting. He also inspected the town with special reference to anti-malaria work, and held an informal discussion with reference to the measures adopted to combat malaria and about the health conditions generally of the city and cantonment. On his way to Bangalore His Excellency halted for a few hours on the 23rd August at Anantapur, where he opened the new college classes of the Ceded Districts College. From Bangalore His Excellency motored to Hosur on the 24th August, returning to Bangalore the same evening. At Hosur he received an address from the Remount Depot villagers and inspected the various departments of the depot. On the 25th August His Excellency visited the Kunigal Stud Farm with His Highness the Yuvaraja of Mysore. While at Bangalore His Excellency witnessed a review of the Bangalore garrison under the command of Major-General Cross-Barratt and inspected the Young Men's Christian Association huts and various other canteens and institutions organized for the benefit of the British garrison. Leaving Bangalore on the night of the 26th August His Excellency arrived at Maddur Railway Station the next morning, whence he proceeded to Kollegal visiting en route the Mysore Darbar electric installation and the waterfall at Sivasamudram. At Kollegal he received an address from its inhabitants, inspected specimens of silk cloths and visited the most important of the local institutions. His Excellency returned to Madras on the 28th August and to Ootacamund on the 4th September. The next tour which began on the 4th January 1919 was to Parlākimedi and Chatrapur. At Parlākimedi His Excellency presented the sanad conferring the title of 'Raja' on the Zamindar of Parlākimedi, laid the foundation stones of the Raja's Oriya Girls' School, Poor House and Hospital Choultry and received an address from the Parlākimedi Municipal Council and deputations from the Utkal Hitheishini Samaj and from the Anjuman Nural Islam and Anjuman Ahli-Hadis. From Chatrapur His Excellency motored to Berhampur, where he held a conference of educationists and others interested in education with special reference to the requirements of the Oriyas at Kallikota College. He returned to Madras on the 9th January. On the 25th January 1919 His Excellency, accompanied by Her Excellency Lady Pentland, left Madras to visit Gingee, Tiruvannāmalai, Alambarai and the Seven Pagodas and returned to Madras on the 29th.

RELATIONS WITH TRIBUTARY STATES

TRAVANCORE STATE

(M.E. 1093—16TH AUGUST 1917 TO 15TH AUGUST 1918)

[*Report on the administration of the Travancore State for the year* 1093 *M.E.*]

[The Maharaja, His Highness Sri Padmanabha Dasa Vanchi Pala Sir Rama Varma Kulasekhara Kiritapati Manne Sultan Maharaja Raja Rama Raja Bahadur Shamsher Jang, G.C.S.I., G.C.I.E., is a Kshatriya. His age is 62. He has a male heir. The area of the State is 7,129 square miles and the population, according to the census of 1911, is 3,428,975. The annual subsidy paid to the British Government is Rs. 8,10,652. The gross revenue is estimated at Rs. 1,65,89,541. The strength of the military force maintained during the year was 1,472.]

General and political

12. In September 1917, His Highness the Maharaja completed his sixtieth year of age and this auspicious event was the occasion for universal rejoicings in the State. In March 1918 His Highness went on a short tour to Peermade and stayed there for 18 days. The war effort of the Darbar consisted of a contribution of 1,596 combatants and 1,422 non-combatants recruited from the State besides donations in aid of war and relief funds and subscriptions to the war loans.

Revenue and finance

13. The financial transactions of the year resulted in a further increase of revenue by Rs. 2·46 lakhs which occurred under some of the principal heads, namely, forest, salt and customs. The current demand under Land Revenue was Rs. 36·52 lakhs as against Rs. 35·71 lakhs in the previous year, and the collections amounted to Rs. 36·13 lakhs as against Rs. 35·70 lakhs. There was a fall, by about 13 per cent, in the collection of arrears and at the close of the year the pending balance therefore rose by about Rs. 0·13 lakh. Compared with the previous year there was a substantial increase in the volume of coercive action taken. The year's total revenue exceeded the expenditure by Rs. 4·33 lakhs. Setting off this surplus against the capital expenditure on the Quilon-Trivandrum Railway which is not charged to revenue, there was a net deficit of Rs. 4·36 lakhs which reduced the Darbar's balance from Rs. 43·83 lakhs to Rs. 39·47 lakhs. The expenditure rose from Rs. 165·17 lakhs to Rs. 170·26 lakhs.

Protection and legislation

14. As in the previous year four ordinary meetings of the Legislative Council were held. Two Regulations were passed by the council and two by His Highness the Maharaja. Six Bills were introduced in the council and referred to select committees.

Police

The actual strength of the police force at the end of the year was 1,932 against a sanctioned strength of 1,955 and there was a general improvement in their discipline and conduct.

Criminal justice

There was an increase under all the heads of grave crime except robbery and cattle theft. A temporary additional Sessions Judge's Court was established during the year, thus increasing the total number of such courts to three. The number of courts that exercised criminal jurisdiction was 76, or two more than in the previous year. The number of offences reported rose slightly, by 115, to 21,590, of which 13,130, or 664 less than in the previous year, were offences under the Penal Code. There was an increase in the number of offences affecting life and in those under theft, house-breaking, criminal intimidation and forgery and this is ascribed to the scarcity of money caused by the war. The percentage of convictions in respect of persons rose from 38 to 42. There was a further fall, from 185 to 132, in the number of juvenile accused. As usual theft was the principal crime of which this class was convicted. The file of the magistracy rose, by 115, to 21,590 and the arrears, by 307, to 997. There was an increase also in the number of cases pending for more than one and three months. The average number of cases disposed of by magistrates was 344 as against 346 in M.E. 1092. The average duration of pendency rose from 42 to 44 days in preliminary inquiries, while that in trials fell from 26 to 21 days. The total number of appeals for disposal was 1,440 as against 1,462 in the previous year and the number disposed of fell from 1,388 to 1,325. The average duration of an appeal rose from 37 to 39 days. The number of cases committed to Sessions Courts was

156 as against 148 in 1092. The number of cases for disposal, inclusive of those ordered to be retried or transferred from one court to another, was 159, of which 152 were disposed of. The average duration of a case fell from sixteen to eight days. In the High Court there were ten referred cases and 223 appeals for disposal, inclusive of arrears, of which eight and 199, respectively, were disposed of. The total prison population Prisons
inclusive of the year's admissions was 1,419. The number discharged was 910, the balance at the close of the year being 509 as against 580 in 1092. There was no appreciable change in the average daily strength of convicted prisoners. The continuance of the temporary additional bench of the Civil justice
High Court and the two temporary Judges' Courts was sanctioned till the end of M.E. 1093. A new temporary Judge's Court was established and the special second Judge's Court constituted in 1092 at Trivandrum was abolished. The six village panchayat courts were continued during the year. The number of suits instituted in all these courts fell, by 1,163, under original suits and rose, by 59, under appeals, or a decrease of 1,104 under both the heads together. In village panchayat courts the institutions numbered 3,376, or 23 more than in the previous year, the total number for disposal being 3,543 as against 3,421 in the previous year, of which 3,406 were disposed of as against 3,372 in 1092. The average duration of suits was 22 days. There was a further fall, by 1,186, to 68,409 in the total institutions in Munsifs' courts which occurred both under ordinary suits and small causes. The disposals, though higher than in the previous year, formed only 75 per cent of the total number as in 1092. The arrears rose, by 484, to 23,938. There was an increase both in the number of suits of between one and two years' pendency and in the number pending for over two years. The average duration of contested cases further rose from nine months and 29 days to ten months and two days. In District Courts there was no appreciable change in institutions but there was a fall in the percentage of disposal: and the arrears of ordinary suits increased from 887 to 959. There was an increase in the pendency of suits over three years old which rose from 37 to not less than 71, of which 20 were pending for over four years. The average duration of both contested and uncontested suits rose, the increase in the case of the latter being marked—six months and nine days as against three months and 15 days in the preceding year. In District Courts 52 per cent of the total number of appeals were disposed of as against 54 per cent in the previous year. There was a satisfactory fall in the average duration of both regular and miscellaneous appeals and there was no appreciable change in the arrears (2,950) left at the close of the year. The High Court disposed of 54 per cent of first and second appeals as against 57 per cent in the preceding year. There was a fall both in the number of documents presented for registration and in the aggregate value of the transactions, Registration
which is attributed to the abnormal increase in the price of foodstuffs and other articles of daily use and the general depression of trade and industries consequent on the war, as also to the failure of crops in many parts of the State.

15. The average rainfall was 83·90 inches, or 8·69 inches more than in **Production and distribution**
1092, but the season was on the whole not favourable to agriculture and prices and wages were higher than in the previous year. There was acute economic distress in the State and as a relief measure a Director of Civil Supplies was appointed. The export of several locally produced foodstuffs was prohibited and arrangements were made for the import of rice and paddy from outside and steps were taken to prevent profiteering and cornering of stocks. The offices of the Agricultural Chemist Agriculture
and the Entomologist were separated during the year and a demonstrator was appointed to help the latter in field work. Analyses of the different varieties of coconut trees were started during the year with a view to determining the relative yield of copra and oil. The manager of the silk farm who had been deputed to Upper India to study the latest improvements in sericulture returned to the State and a scheme for the development of sericulture as a cottage industry was

sanctioned during the year. The State has a gratifying record of agricultural progress achieved in various directions. The Department of Fisheries also did much useful work. There was no appreciable change in the number of factories which worked during the year. The period of special duty of the officer in charge of the Industrial Survey was extended for another year and bulletins on several interesting subjects were issued. The total volume of the external trade rose, by Rs. 72·73 lakhs, to Rs. 820·27 lakhs, the value of the exports and imports being much in the same proportion as in the previous year, namely, 63·2 per cent and 36·8 per cent respectively. The trade in the produce of the coconut tree, the duty on which alone formed 53·7 per cent of the collections from dutiable exports, fell, by Rs. 7·47 lakhs, to Rs. 150·37 lakhs. The total value of rice and paddy imported during the year rose, by Rs. 1·36 lakhs, to Rs. 190·20 lakhs. The quantity of rubber exported increased, by lb. 19·12 lakhs, to lb. 53·14 lakhs and the quantity of tea exported, by lb. 9·35 lakhs, to lb. 199·70 lakhs. As usual the bulk of the trade was with British India. The total expenditure on Public Works amounted to Rs. 26·31 lakhs as against Rs. 26·82 lakhs in the previous year. The outlay on the Kodayar Works was Rs. 1·66 lakhs, of which that on the capital account of the project amounted to Rs. 0·56 lakh. Against this a sum of Rs. 0·75 lakh was realized by the sale of tank-beds. The total expenditure on the project still stood at a little less than Rs. 80 lakhs. There was a slight fall in the total area irrigated for which water cess was levied, which stood at 48,059 acres against 53,544 acres in the previous year. The outlay on the maintenance of main roads amounted to Rs. 5·94 lakhs as against Rs. 4·50 lakhs in the previous year. The average cost of maintenance was Rs. 187 per mile as against Rs. 178 in the previous year. The outlay on "Communications—Original Works," which included also special repairs, amounted to Rs. 4·86 lakhs, while that on buildings to Rs. 3 lakhs, the corresponding figures for the previous year being Rs. 5·14 lakhs and Rs. 3·51 lakhs. The railway line from Quilon to Trivandrum was opened for traffic with effect from the 1st January 1918 and was worked by the South Indian Railway as part of the Native State section of the Travancore Branch. The amount spent by the Darbar on account of this extension during the year was Rs. 8·70 lakhs as against Rs. 11·93 lakhs in 1092, the total expenditure being Rs. 50·18 lakhs.

Factories and industries

Trade

Public works

Railway

Vital statistics and medical services

16. The total number of births registered during the year was 72,658 and the total number of deaths 54,066 as against 74,991 and 48,241, respectively, in 1092, the birth and death rates being 21·2 and 15·7 per mille as against 21·9 and 14·1 in the preceding year. There was an increase in mortality under all the heads, that under cholera and smallpox, which prevailed in an epidemic form, being marked. The largest increase was under fevers which was due to the prevalence of influenza about the close of the year. There was a further satisfactory increase, by over 60,000, in the number of vaccinations performed during the year which amounted to 266,909. The number of infantile vaccinations performed, which amounted to 14,476, also showed a gratifying increase (1,724). Twenty-seven hospitals, as in the previous year, and 30 dispensaries, or one more than in 1092, were maintained during the year, exclusive of the Leper and Lunatic Asylums and the Contagious Diseases Hospital. There was a fall in the total number of patients who obtained relief which amounted to 867,961 as against 883,917 in the previous year. There was, however, a slight increase, by over 250, in the number (18,336) of in-patients treated. The department of Ayurveda which controls indigenous medical institutions was thoroughly reorganized during the year.

Diseases

Vaccination

Medical relief

Education

17. A strong and representative committee was formed during the year under the presidentship of the Director of Public Instruction to investigate and report on the question of a separate University for Travancore. The committee held two sessions during the year. In November 1917 the centenary of English education in the State was celebrated in all English schools and colleges. To cope with the increased inspection work

entailed by the steady growth in the number of vernacular schools for boys, the staff of Assistant Inspectors was further strengthened by the appointment of two officers to the cadre and the districts were redistributed into 22 instead of 20 for the whole State. The appointment of a Muhammadan Inspector was sanctioned. Of the total population of the State, viz., 3,428,975, 10·95 per cent were attending recognized schools as against 10·14 per cent during the previous year. The percentage of pupils attending such schools to the total population of school-going age was 72·8 as against 67·85 in 1092. The number of collegiate institutions affiliated to the University of Madras was five as in the preceding year, but their strength rose from 929 to 1,041. The number of recognized English schools increased from 86 to 94 and their strength from 22,703 to 24,434.

COCHIN STATE

(M.E. 1093—16TH AUGUST 1917 TO 15TH AUGUST 1918)

[*Report on the administration of the Cochin State for the year* 1093 *M.E.*]

[The Raja, His Highness Sir Sri Rama Varma, G.C.I.E., is a Kshatriya. He is 60 years of age and has male heirs. He pays a tribute of Rs. 2,00,089 and maintains a military force of 290 men. According to the census of 1911 the population of the State was 918,110. The gross revenue was Rs. 54 lakhs. The Resident for Travancore is also Resident for Cochin.]

General and political

18. His Highness the Raja was created a Knight Grand Commander of the Most Eminent Order of the Indian Empire and the investiture took place at Madras in March 1919. Owing to the demise of his mother during the year and the connected ceremonies that had to be performed daily, His Highness was unable to leave the State throughout the year. The Darbar contributed Rs. 14·27 lakhs towards the Indian War Loans, including stocks and bonds purchased by its subjects. It also made a donation of nearly Rs. 0·32 lakh for war purposes and also furnished 581 combatant and 493 non-combatant recruits to His Majesty's forces. A contribution of over Rs. 16,000 was made to 'Our Day' fund as the result of a fête and sale held at Ernakulam.

Revenue and finance

19. The State revenue rose from Rs. 46·36 lakhs to Rs. 53·99 lakhs and the expenditure from Rs. 43·46 lakhs to Rs. 47·19 lakhs, resulting in the rise of the Darbar balance from Rs. 19·98 lakhs to Rs. 26·79 lakhs. The principal items which contributed to the increase in receipts were Customs (Rs. 3 lakhs), Land revenue (Rs. 0·23 lakh), Salt (Rs. 0·66 lakh), Abkāri and Ganja (Rs. 0·91 lakh), Forests (Rs. 1·11 lakhs), Interest (Rs. 0·51 lakh) and Railway (Rs. 0·94 lakh). The only head which showed any appreciable decline under receipts was Stamps (— Rs. 0·23 lakh), and this was due to the prevailing war conditions affecting transactions. The increase of nearly Rs. 3·73 lakhs in expenditure occurred principally under Excise (Rs. 1·90 lakhs). Other noteworthy increases took place under Agriculture and Fisheries (Rs. 0·66 lakh), Education (Rs. 0·38 lakh), Public Works (Rs. 0·98 lakh) and Railways (Rs. 0·36 lakh).

Protection and legislation

Police

20. Eleven regulations were passed during the year and three proclamations were issued by His Highness the Raja. The Police force consisted of 89 officers and 498 men as against 92 and 499 in the previous year. The total number of cases reported under the Penal Code and under local and special laws further fell from 1,179 to 1,038. Including the previous year's pendency there were 1,059 cases for investigation against 1,199 in M.E. 1092, of which 98·3 per cent was disposed of as against 98·2 per cent in the previous year. The percentage of conviction of cases charged before the courts rose from 86·6 to 88·49. The average cost of a policeman was much the same as in the previous year, viz., Rs. 196·40. Including arrears the number of cases for disposal by magistrates fell from 3,518 to 3,092, of which only 2,935 were disposed of as against 3,363 in the previous year. The percentage of conviction fell further from 31·1 to 28·1. The percentage of appealable decisions of second-class magistrates appealed against was

Criminal justice

27·2 as against 27·7 in the previous year, but that of original decisions confirmed again decreased from 50·01 to 38·3. There were 73 appeals for disposal by Sessions Judges as against 44 in the previous year, of which eight were left pending. The Chief Court had 25 appeals for disposal, but

Prisons

disposed of all but three of them. There was no change in the number of prisons maintained in the State. The daily average number of prisoners

Civil justice

was 137·63 as against 134·08 in M.E. 1092. The number of village panchayat courts rose, by six, to 12. Otherwise there was no change in the number of tribunals that exercised original or appellate jurisdiction. The number of suits instituted rose from 15,999 to 16,447, the number disposed of also increasing from 15,512 to 16,118. The number of suits pending at the close of the year was 2,359 as against 2,030 in M.E. 1092. The number of appeals filed fell from 1,136 to 896, but the disposals decreased from 968 to 893, resulting in an increase in pendency from 549 to 552. In Munsifs' Courts the pendency increased from 1,667 to 1,858 suits, of which those pending for over one year and for over six months were, respectively, 36 and 428 as against 15 and 334 in M.E. 1092. Of a total of 990 small cause suits for disposal during the year, Panchayat Courts disposed of no less than 908. Including the arrears of the previous year, District Judges had 988 appeals for disposal, but the number disposed of further fell from 664 to 600. There was a rise in the average duration of contested original suits in all Munsifs' courts and of appeals in District courts. The Chief Court had 457 appeals for disposal including the arrears of the previous year as against 487 in 1092. The disposals fell from 304 to 293, leaving a balance of 164 appeals as against 183 in the previous year. There was a rise in the average duration of con-

Registration

tested regular and second appeals. The number of registration offices increased from 21 to 22, but the number of documents registered fell, by 4,436, to 50,179. Two Joint Stock Companies were registered during the year.

Production and distribution

21. The total area under cultivation rose, by about 600 acres, to 501,781 acres, the increase being due to the assignment of wastes, porambokes and forest exclusions. The total current demand under Land

Land revenue

Revenue proper fell from Rs. 10·74 lakhs to Rs. 10·61 lakhs. But the aggregate demand under all heads amounted to Rs. 11·77 lakhs as against Rs. 11·63 lakhs in the previous year. The percentage of collection to the current demand continued to be 99·9 as in the previous year. The

Agriculture

Agricultural department was entirely reorganized on the return of the State scholar from England. A central experimental farm was started and experimental work of raising dry crops under a scheme of rotation was started in it and trials were made with different varieties of exotic paddy. Experimental and demonstration work was taken up in selected centres in private lands in certain taluks with the view of bringing home to the villagers the advantages of scientific agriculture. Attempts at popularizing the use of green manures and the supply of seeds, manures, fruit

Co-operative societies

trees and implements of improved pattern were continued. Fifteen co-operative societies, or one less than in 1092, were registered during the year and all but two were in working order. The formation of a central co-operative bank and the increase in non-credit societies were special features of the year's work. The loans issued by agricultural societies for productive and useful purposes amounted to Rs. 0·83 lakh as

Forests

against Rs. 0·52 lakh in 1092. The planting of new areas of State forests with the more valuable species was steadily proceeded with and trials were made with species foreign to Cochin. An encouraging measure of success met these experiments, especially in the case of sandalwood. The preparation of working plans, the absence of which hitherto has led to the unrestricted working of areas to their serious detriment, was taken in hand. The plan for one circle was completed and a beginning was made with others. An equally important desideratum, the total lack of forest maps, was also being supplied. The survey of the economic resources of the forests was being carried out and a forest training school for subordinates

Tramways

was opened during the year. The total length of the Forest tramway

opened up for traffic, including the double lines on the inclines, remained the same as in the previous year, viz., a little over 52 miles. The cost of maintenance was Rs. 1·04 lakhs as against Rs. 1·03 lakhs in the previous year, and the total expenditure amounted to Rs. 1·20 lakhs as against Rs. 1·24 lakhs in 1092. The expenditure on State works, including establishment charges, was Rs. 6·68 lakhs as against Rs. 5·71 lakhs in the previous year. The Special Engineer and staff appointed to investigate the scheme of wet cultivation in the State prepared estimates and drawings for works in one taluk and took up the investigation in the other taluks. The gross earnings of the State Railway rose, by Rs. 0·94 lakh, to Rs. 8·88 lakhs, and the net earnings of the year gave a return of 6·36 per cent on the capital outlay as against 5·54 per cent in 1092.

Public works

Railway

22. The total number of births registered during the year fell, by 76, to 15,326; but the number of deaths again rose, by no less than 3,450, to 13,847, the percentage to population being 1·51 as against 1·12 in 1092. This was in the main due to the prevalence of cholera and smallpox, the mortality from which amounted to 201 and 1,818 as against 8 and 17 respectively in the previous year. The number of medical institutions at the end of the year rose from 28 to 30, but there was a fall, by 39,174, to 264,911 in the number of patients treated. The number of in-patients treated, however, showed a slight increase. The training of indigenous midwives has so far been eminently promising. In the matter of rural sanitation a comprehensive examination of the villages of the State was followed by the drawing up of a five years' programme of water-supply and sanitary works. The work of dealing with congested and insanitary areas, chiefly by means of providing roads and proper drainage, was taken in hand and spread over a period of years. The claims of the indigenous system of medicine were recognized by the introduction of a system of grants-in-aid to Ayurvedic institutions under certain rigid restrictions as to the qualifications of *vaidyans* employed, the character of their work and the quality of the medicines used.

Vital statistics and medical services

Medical relief

23. The total number of Sirkar schools rose from 137 to 145 and that of aided schools from 193 to 209 ; and the total number of pupils in both classes of institutions increased, by 5,533, to 62,434. Progress was especially marked among the sections classed as backward. The percentage of educational work done by Sirkar institutions rose from 36·7 to 40·5 and that by aided agency from 35·1 to 44. The number of high schools rose from 16 to 19, of which 12 were Sirkar and 7 aided as against 10 and 6 respectively in 1092, and the total number of pupils that were given upper secondary education increased from 1,756 to 1,974. The number of schools in which lower secondary instruction was imparted rose, by five, to 45, of which 25 were Sirkar and 20 aided as against 23 and 17, respectively, in the previous year. Primary education was imparted in 914 schools as against 1,372 in the previous year. The decrease occurred entirely under unaided and indigenous institutions which are not permanent and are subject to fluctuation according to seasons and prevailing conditions.

Education

PUDUKKŌTTAI STATE

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Report on the administration of Pudukkōttai for fasli* 1328]

[The Raja, His Highness Sri Brihadamba Das Raja Sir Martanda Bhairava Tondaiman Bahadur, G.C.I.E., is a Kallar by caste and is 43 years of age. The population of the State, according to the census of 1911, is 411,878. The Raja pays no tribute and maintains a military force of 110 infantry and 18 cavalry. The Collector of Trichinopoly is ex-officio Political Agent for the State.]

24. His Highness the Raja continued to stay in Australia throughout the year with the Rani. The conclusion of the armistice between the Allies and Germany was celebrated in November 1918 in a public darbar. Special thanksgiving services were also held in all Sirkar temples

General and political

mosques and churches. Contributions amounting in the aggregate to Rs. 3·63 lakhs were sanctioned by His Highness the Raja to the several War funds and War charities and the State has invested Rs. 21·2 lakhs in the first War Loan and Rs. 7·5 lakhs in the second War Loan. At a late stage of the war the Darbar was called upon to help in the matter of recruiting men for field service and with a view to stimulate enlistment it issued certain orders regarding the assignment of assessed waste lands to recruits or soldiers. Special facilities were afforded for the education of the children of Indian soldiers and for protection in respect of civil and revenue litigation of those serving under war conditions.

Revenue and finance

Land revenue

25. The total receipts of the fasli amounted to Rs. 20·84 lakhs, or an increase of Rs. 0·81 lakh, which was contributed by all the principal heads of revenue excepting Land Revenue and Civil Works. The current demand under Land Revenue was Rs. 9·85 lakhs as against Rs. 9·64 lakhs in the previous fasli, of which the collections amounted to Rs. 9·72 lakhs or 98·66 per cent of the demand as against 99·08 per cent in the previous fasli. The slight fall in the percentage was due principally to the bad character of the season.

Salt and Abkāri

The total revenue under Salt and Abkāri inclusive of the contribution from the British Government rose from Rs. 2·98 lakhs to Rs. 3·68 lakhs and the expenditure from 0·32 lakh to Rs. 0·36 lakh. The total expenditure fell from Rs. 19·73 lakhs to Rs. 16·63 lakhs, the latter figure representing more or less the normal expenditure of the State. The opening balance of the fasli was Rs. 30·93 lakhs and the closing balance Rs. 35·14 lakhs, out of which a sum of Rs. 15·19 lakhs was invested in War Loan 1929—47, Rs. 13·46 lakhs in War Bonds and Rs. 6·35 lakhs in fixed deposits in the Bank of Madras.

Production and distribution

Season and crops

26. The season was very unfavourable for agricultural operations. The total rainfall was only 28·48 inches as against 38·57 inches in the previous fasli and an average of 34·97 inches for the preceding five years. The prices of food-grains were much higher than in the previous fasli and considerably in excess of the last five years' average. Pasture was available only in parts and fodder was procurable only at high prices. Out of a total cultivable area of 505,819 acres, 91·9 per cent was under cultivation as against 75·5 per cent in the previous fasli. There was, however, a failure of crops to such an extent as to necessitate the supply of food-grains from outside the State for sale in retail to the poor. Rangoon rice was purchased and sold through State agency at the capital, and in a few rural stations. Owing to the bad season, no appreciable work could be done by the Agricultural department. Three new co-operative credit societies were registered during the year, thus increasing their total number to 30. The work of these, save that of four, was as usual satisfactory. Inam survey work was practically finished during the year.

Protection and legislation

27. There were no meetings of the Legislative Advisory Council during the fasli. A Proclamation was issued by the Darbar to prohibit the melting, breaking up or misuse of current gold and silver coins. The seventeenth session of the Representative Assembly was held in September 1918. Twenty out of thirty members were present. There were 151 interpellations.

Police

The constitution of the police force underwent no change except in respect of the constabulary, the strength of which was increased, by 29, to 231. The total number of offences of all kinds reported rose slightly, by 24, to 2,076. The percentage of detection fell from 85 to 78, although there was a slight improvement in detective results in respect of cases under the Penal Code. There was a large increase in the number of grave crimes during the year.

Criminal justice

The total number of cases for disposal in Magistrates' courts rose, by 45, to 4,264, of which 94·54 per cent were disposed of as against 96·18 per cent in the previous fasli. There was a slight fall in the average duration of the cases decided, and the work of the criminal courts was on the whole satisfactory.

Prisons

The total jail population including the year's admissions was 368, of whom 308 prisoners were discharged, leaving at the close of the fasli 52 convicts, seven undertrials and one lunatic. The daily average population fell from 67·63 to 65·39. There were four escapes and an increase

in the number of jail offences from 13 to 29, from which it is apparent that the state of discipline in the Central Jail was not satisfactory. The volume of fresh litigation decreased slightly during the year. There was a trifling increase in the number of original suits followed by a corresponding fall in appeals. The percentage of disposal of original suits was 89·8 as against 87·7 in the previous fasli and the pendency decreased from 1,224 to 1,042. The percentage of disposal of regular suits which are tried only by the Chief Court rose from 77·15 to 78·28. The average duration of contested suits rose from 187 to 215 days. The percentage of disposal of appeals fell from 77·28 to 59·52 and their average duration rose from 230 to 232 days. With one exception the working of the rural Small Cause courts was satisfactory. The work of the Municipal Council continued to be successful. The fasli opened with a balance of Rs. 0·12 lakh, the municipal revenues of the year amounted to Rs. 0·66 lakh and the expenditure to Rs. 0·61 lakh, leaving a closing balance of Rs. 0·17 lakh. The work of the union panchayats was on the whole less satisfactory than in the previous fasli. Civil justice

28. Public health was far from satisfactory. Cholera, smallpox and influenza prevailed in all parts of the State, the mortality from the first mentioned two causes amounting to 466 and 656, respectively. Of a registered total of 12,310 deaths as against 7,715 in fasli 1327 nearly 5,000 were ascribed to the all-embracing classification—'fever.' The total number of births registered was 8,591 as against 7,805 in the previous fasli. The number of patients who were treated during the fasli in all the medical institutions of the State rose, by over 6,000, to nearly 127,500. There was also an increase of nearly 3,000 in the number of patients treated in the rural dispensaries. The medical staff of the State did very efficient work during the influenza epidemic. There was a slight fall both in the number of cases vaccinated during the year and in the percentage of successful operations. The work of this department cannot be said to be entirely satisfactory. **Vital statistics and medical services**

29. The educational institutions of the State had a further accession of 32 to their number and of 422 to their strength, the increase representing 7·6 and 2·5 per cent respectively. The total number of boys under instruction rose from 15,238 to 21,565 which represents a percentage of 73·1 to the total male population of school-going age as against 51·7 per cent in the previous year. The total number of girls under instruction was 2,231 or 6·9 per cent of the total girl population of school-going age as against 5·6 in the previous year. There was one school for every 2·6 square miles of the area and for every 911 persons of the population as against 2·8 square miles of the area and every 980 persons in the previous fasli. The work of the department during the fasli was hampered by the influenza epidemic, on account of which many institutions had to be closed. The work of the college was also similarly affected. The results in the public examinations were again not good although the college gained a higher percentage of selection in the Secondary School-leaving Certificate Examination than several other high schools. The University Inspection Commission visited the college in September 1918. **Education**

BANGANAPALLE STATE

[*Administration Report of the Banganapalle State for the official year* 1918–19]

[Nawab Saiyid Ghulam 'Ali Khan Bahadur, a Muhammadan of the Shiah sect, is the ruler of the State. He is 45 years old and has male heirs. He pays no tribute and maintains no military force. The population of the State is 39,356 (1911 census). The Collector of Kurnool is Political Agent.]

30. The Nawab visited Bangalore in April 1918 and remained there for about a month for the benefit of his health. He was granted His Majesty's Commission in the Indian Land Forces, and at a special darbar **General and political**

held at the palace to celebrate the event his subjects contributed nearly Rs. 10,000 towards the Second Indian War Loan. He underwent military training in Madras for about two months from December 1918. His eldest son continued to make good progress at the Mayo College, Ajmer, where his two younger sons were also admitted during the year. The year was very prosperous to agriculturists as food-grains fetched high prices. Cholam, the staple grain, was sold at 7 seers per rupee throughout the year. It was the highest price since the famine year of 1877. There was, however, great scarcity of rice and kerosene oil which was relieved to some extent by help given by the Director of Civil Supplies, Madras, at the instance of the Political Agent. The rainfall was only 12·36 inches, but it was timely and well distributed. In the majority of villages there was a bumper crop of green gram and horse gram. The damages caused by the floods of 1916 to the fields and mango gardens were repaired to a certain extent. Some of the works under the Town Improvement Scheme could not be undertaken owing to dearth of labour. One big culvert was constructed on the Panyam road which has greatly facilitated traffic in the rainy season. Two large irrigation dams which were totally washed away by the floods of 1916 were reconstructed during the year. The work of restoration of the huge Jolapuram tank could not be undertaken for want of a competent surveyor. The carpet market was very dull. No foreign or mufassal orders could be executed because of the difficulty in obtaining shipping and the high and prohibitive freight and the railway restrictions on transport. The work of the weaving factory was brought to a standstill for nearly two months owing to the prevalence of influenza and cholera. In the Gwalior Exhibition the Industrial department of the State obtained a certificate of merit for lacquered trays and a bronze medal for silk and woollen shawls.

Industries

Revenue and finance

31. The total receipts during the year were Rs. 2·82 lakhs as against Rs. 2·74 lakhs in the previous year. Increases occurred under road cess, abkāri and opium and stamps. The total expenditure rose from Rs. 2·56 lakhs to Rs. 2·70 lakhs. The increase was chiefly due to the charges incurred on account of the Nawab's military training at Madras, his staff remaining with him there, his trip to Bangalore, the additional expenditure incurred on account of the education of his younger sons at the Mayo College and the excess grant paid to the municipality.

Protection and legislation

32. A notification was issued during the year prohibiting the melting and breaking of current gold and silver coins. Crime increased on account of the prevailing scarcity, but the increase was accompanied by an improvement in detection. The percentage of convictions of accused persons sent for trial improved from 18·75 to 33·76. The percentage of recoveries of property stolen was poor, being 25·57 as against 64·23 in the previous year.

Vital statistics and medical services

33. Public health during the year was again very unsatisfactory, the total mortality rising further from 49·3 to 75·48 per mille. Cholera and influenza prevailed in almost all the villages of the State and carried away nearly three thousand persons, or nearly a thousand more than in the previous year. The State, however, took special care to provide convenience and comforts to patients by the free supply of medicines and diets and by the erectionof temporary sheds to remove congestion. Some cases of plague were reported in the villages of the Nandyal taluk on the borders of the State, but prompt precautionary measures were adopted to check the spread of the disease. The staff of the State hospital was overworked owing to the prevalence of epidemics. There was a satisfactory increase from 411 to 923 in the total number of cases vaccinated during the year and the percentage of unsuccessful cases fell from 19·22 to 10·90.

Education

34. There were 27 State schools or one more than in the previous year, consisting of twenty Telugu schools, nineteen for boys and one for girls, and seven Urdu schools, six for boys and one for girls. The prevalence of epidemic diseases and the dearth of labour reduced the strength of these institutions from 1,278 to 1,231, but the daily average attendance

improved from 772 to 819. The number of mission schools for Panchamas which received grants-in-aid fell from nine to eight and the number of State-aided private schools rose from four to five. With a view to improve the Hindu girls' school, Banganapalle, two trained teachers—a male and a female—were appointed during the year. Scholarships were given to one college student, three high school students and two poor deserving students studying in the local schools.

SANDUR STATE

[*Administration Report of the Sandur State for the official year* 1918-19]

[The Jaghirdar, Raja Srimant Venkata Rao, Rao Sahib, Hindu Rao Ghorapade Mamlukatmadar, Senapati, is a Mahratta. He is 27 years of age. He pays no tribute and maintains no military force. He has been removed temporarily from the direct administration of the Jaghir. The population of the State is 13,517 (1911 census).]

General and political

35. Owing to the persistent extravagance and consequent indebtedness of the Jaghirdar and to certain evidence of maladministration, the Government found it necessary to remove him temporarily from the direct administration of the jaghir and assumed it themselves by a Proclamation, dated the 1st October 1918. The Collector of Bellary, as Political Agent of the State, exercises from that date, subject to the control of the Government, the powers of administration which the Jaghirdar possessed. The Diwan is in direct charge of the jaghir under the control of the Political Agent. An allowance of Rs. 2,000 per mensem was made to the Raja who is required to reside outside the limits of the State and of the Bellary district, but is otherwise accorded the honours and privileges he previously enjoyed.

Revenue and finance

36. The chief sources of income are land revenue, forests and abkāri. Excluding the rents from mines, not realized during the year, the total receipts amounted to Rs. 1·03 lakhs as against Rs. 0·69 lakh in the previous year. The expenditure fell from Rs. 0·75 lakh to Rs. 0·67 lakh.

Protection

Police

37. There was no change in the constitution of the police force, but as several vacancies, due mostly to resignation among constables, could not be filled up for want of applicants, the pay of the constables was raised by one rupee per mensem in order to attract men for enlistment. There was an improvement in the percentage of cases and accused persons convicted during the year, the figures being, respectively, 75·56 and 80·95 as against 72·09 and 72·9 in the previous year. There was a considerable decrease, from Rs. 4,184 to Rs. 1,650, in the value of property stolen, but the percentage of recovery was very poor, being 12·20 as against 83·84 in 1917–18.

Courts

As First-class Magistrate the Diwan disposed of 137 cases out of 139 filed as against 171 and 173, respectively, in the previous year. There was one criminal appeal and the conviction by the lower court was confirmed. As District Munsif, the Diwan had 50 cases for disposal as against 33 in the previous year and disposed of 42 as against 26.

Jail

The cost of maintaining the jail at Sāndūr amounted to Rs. 405, the previous year's figure being only Rs. 59. There was, however, a corresponding rise, from Rs. 24 to Rs. 292, in the earnings of the prisoners and these were as usual credited to State funds.

Production and distribution

38. The rains were not opportune, the total rainfall being 24·86 inches as against 45·48 inches in the previous year and an average of 35·89 inches for the past five years. The average yield of cholam, the principal food-grain, was 8 annas to 12 annas. Owing to the scarcity of this grain, restrictions were placed on its export. The price, which was fixed at 10 seers per rupee in the previous year, remained steady at that rate till January 1919. It was subsequently fixed at 8½ seers and then rose gradually to 6¼ seers. In spite of this scarcity the condition of the poor was not seriously affected as the market was always stocked with a sufficient quantity of food-grains and good wages were earned in the cutting of grass and fuel supplied for military purposes. Many coolies

also earned good wages in paddy and sugarcane harvests in the neighbouring villages of the Hospet taluk. The leased forests were surrendered by the British Government from 1st July 1918. The total receipts under forests were Rs. 25,604 as against Rs. 18,554 in the previous year.

Vital statistics and medical services

39. Public health was not good during most part of the year. Cholera prevailed in June and July in eight villages and influenza in 15 villages from October to December. Special arrangements were made for the distribution of medicines at the houses of patients. The mortality, mostly due to these diseases, mounted from 420 to 1,186, while the number of births, on the other hand, fell from 489 to 375. The ratios of births and deaths were 28 and 87·06 per mille as against 36 and 31, respectively, in the previous year. The number of patients who received relief in the State dispensary was 11,272 as against 10,718 in the previous year, the rise being due to the prevalence of influenza. The average daily attendance of the old and the new cases was 89·60 as against 78·46 in 1917–18. The vaccination results were not very successful and this was due to the absence of a trained operator.

Education

40. There was no variation in the number of educational institutions in the State, in their attendance, or in the cost of their maintenance.

CONDITION OF THE PEOPLE

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Season and Crop Report for fasli* 1328; *Department of Statistics, India*; *Prices and wages in India*]

41. The stocks of grain were generally insufficient during the year, though as far as rice was concerned the shortage was to a large extent made good by imports from Burma and Bengal. The harvest prices of the principal food-grains were dearer than in the previous year with the single exception of ragi in one district where its price was stationary. In most cases prices were just about twice what they were before the war. Rice and cumbu each went above the scarcity rates in eight districts and cholam in all the districts. The rise was general and steady and up to the close of the fasli showed no improvement. The visitation of influenza in a severe form affected the rural population to an extent hardly realized in the towns, villages in some cases losing no less than a third of their population. The scarcity would have been more marked had not this epidemic claimed such a heavy toll of victims. Industrial crops were subject as usual to violent fluctuations of the market. Cotton started the year at a very high price. Dealers for a long time held out for top prices, but gradually, as the new crop came in, prices went down and the year which opened with westerns at about Rs. 575 per candy closed with it at Rs. 275. Growers, however, still hoped for an improvement and were bringing their produce into market with reluctance. The temptation to grow cotton in excess has been too much for many a ryot with the result that, owing to their neglect of proper rotation, they now have dirty fields to set off against the money in their pockets. The year saw the first attempt at Government control in the matter of cropping, in the introduction of the Pest Act, in order to compel ryots to treat Cambodia cotton as an annual: and the trial was most successful. The short crop of groundnut of the previous year had the effect of keeping prices up, and starting about Rs. 50 per candy, the price steadily rose to a maximum of Rs. 80 until the arrival of the new crop tended to bring it down. The area under indigo showed a further decline and this reduction, coupled with an increased export to Japan, has kept the price up to over Rs. 300 per cwt. Wages showed a tendency to increase rapidly as might be expected, but here and there one came across cases where they must be inadequate, and there is no doubt that the poorer classes suffered considerably in many places. Labour was so scarce in some localities that labourers were able to

dictate their own terms, but even where they were paid in grain they had little actual cash for the purchase of other necessaries. The smaller landholders or tenants prospered, especially those who had land under wells.

POLITICAL PENSIONS (1918)

42. The political pensions in force on the 1st January 1918 amounted to Rs. 2,78,994–7–0 per annum and were distributed among 475 pensioners. During the year pensions amounting to Rs. 4,788 were either newly sanctioned or were transferred from other provinces, and pensions amounting to Rs. 14,506–10–0 either lapsed or were transferred to other provinces. Twenty-eight pensioners died and 22 new pensioners were added to the list. The pensions of two persons were commuted, one in full and the other in part. The pensions in force on the 1st January 1919 amounted to Rs. 2,69,275–13–0 and were distributed among 457 pensioners. The payments made to Carnatic stipendiaries and to the Tanjore family aggregated Rs. 1,94,534–1–8 and Rs. 32,189–3–10, respectively. The former amount includes the commuted value of the two pensions referred to above.

CHAPTER II

ADMINISTRATION OF THE LAND

REALIZATION OF LAND REVENUE

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918

[*Report on the settlement of Land Revenue for fasli* 1327; *Statistics of British India, Vol. II—Financial Statistics, Part II—Land Revenue*]

Sources of land revenue

43. The total current demand under Land Revenue and Cesses during the fasli amounted to Rs. 784·35 lakhs as against Rs. 778·00 lakhs in fasli 1326, of which 98·3 per cent were collected within the fasli as against 98·5 per cent in the previous year. Of the various sources from which the Government derived their land revenue, that on peshkash, or revenue from permanently-settled estates, amounted to Rs. 49·92 lakhs as against Rs. 49·88 lakhs in the previous fasli. The revenue from shrotriyam jodi, or quit-rent levied on inam villages, remained at much the same figure as in the previous fasli (Rs. 7·57 lakhs). The net ryotwari demand excluding remissions but including water-rate, second crop charge and miscellaneous revenue rose, by Rs. 4·41 lakhs, to Rs. 645·57 lakhs. Increases occurred under assessment of holdings (Rs. 3·11 lakhs), water-rate and second crop charge (Rs. 1·37 lakhs), while remissions and miscellaneous revenue decreased by Rs. 2·17 lakhs and Rs. 2·24 lakhs, respectively. The total extent of ryotwari holdings during the year was 25·89 million acres which exceeded that of the previous year by nearly 90,000 acres. The increase was contributed by all the districts, excepting Gōdāvari and Kurnool, and was again marked in Anantapur and South Kanara. The total assessment on holdings rose, by Rs. 3·11 lakhs, to Rs. 522·60 lakhs. Increases occurred in all but two districts, viz., Gōdāvari and Anjengo, South Arcot and Madura alone being responsible for about 70 per cent of the total which was due mostly to the introduction of re-settlement rates during the year in portions of those two districts. As compared with the previous year, the total area cropped on ryotwari holdings showed a decrease of 151,109 acres under dry and 10,696 acres under wet. Dry waste charged showed an increase of 228,187 acres; wet waste charged increased by 21,682 acres and wet waste remitted fell by 2,455 acres; including the area under "miscellaneous cultivation," the total area cropped amounted to 21·53 million acres as against 21·74 million acres in the previous fasli. The revenue from water-rate and second crop charge rose, by Rs. 1·37 lakhs, to Rs. 39·40 lakhs. Remissions and beriz deductions amounted to Rs. 14·44 lakhs as against Rs. 16·62 lakhs in the previous fasli. There was a net decrease of Rs. 2·14 lakhs under season remissions. Beriz deductions also showed a decrease while fixed remissions showed an increase. The remission under "waste remitted" amounted to Rs. 1·68 lakhs, or Rs. 0·12 lakh less than in the previous year. The total amount remitted under shavi or short crop was Rs. 0·40 lakh, or Rs. 0·97 lakh less than that of the previous year. Almost the whole of this related to wet land. A remission of Rs. 9,012 was granted under "short crop." 'Tirwakammi' remissions (the remission of the difference between wet and dry assessment on wet land cultivated with dry crop owing to the insufficiency or failure of water-supply) fell, by Rs. 0·39 lakh, to Rs. 1·21 lakhs. Compared with the previous year, there was a decrease also of Rs. 0·61 lakh in remissions under "injury by floods," which amounted to Rs. 0·91 lakh. "Fixed remissions" (abatement of the demand granted for reasons unconnected with the season) rose, by Rs. 5,550, to Rs. 1·27 lakhs. Beriz

Peshkash

Shrotriyam jodi

Ryotwari

Remissions and beriz deductions

deductions (deductions made from village collections in favour of inamdars and religious institutions) further fell, by Rs. 9,262, to Rs. 8·87 lakhs. Receipts under "miscellaneous revenue" amounted to Rs. 98·01 lakhs, showing a net decrease of Rs. 2·24 lakhs from that of the previous year. The current demand under cesses rose from Rs. 73·16 lakhs to Rs. 75·19 lakhs. There were increases in permanently-settled estates, markedly in Ganjām, Vizagapatam, Nellore, Chingleput, Chittoor and Rāmnād, in whole inam villages, particularly in Ganjām and Vizagapatam, and under ryotwar and miscellaneous. The increase under the last item mainly followed the increase in the revenue. The total balance of land revenue and cesses outstanding on the 1st July 1918, including both arrears and current, was Rs. 13·40 lakhs.

Miscellaneous revenue

Cesses

44. Up to the end of December 1918, Rs. 10·41 lakhs had been collected and the net recoverable balance on the 1st January 1919 was Rs. 2·66 lakhs. The charges of district administration, including salaries and allowances of revenue inspectors but excluding those of village establishments, were Rs. 53·09 lakhs which, as in the previous year, formed 6·8 per cent of the land revenue and cesses realized. The village service charges (including proprietary estates) were Rs. 55·40 lakhs, or a decrease of Rs. 0·35 lakh from that of the previous fasli. Including this sum the total charges were Rs. 108·49 lakhs or 13·9 per cent of the collections of land revenue and cesses as against 14 per cent in fasli 1326.

Collections

45. There was a further decrease in the number of coercive processes issued for the realization of Government dues which fell, by 106,725, to 1,016,758. The rule that demand notices should be issued only when absolutely necessary was kept in view. The number of such notices sent out during the year decreased in fourteen districts and increased in eleven. The increase was marked in Kistna, North Arcot, Tanjore, Salem and Malabar. In the last named district it was due to the fall in the price of coconuts owing to the war. The increase in North Arcot and Tanjore was due to the unfavourable season and the fall in the price of groundnut. In Salem it was due to the inclusion of figures relating to the Nāmakkal taluk which was transferred from the Trichinopoly district. The number of distraints or attachments rose, by 10,725, to 71,941. The increase occurred in twelve districts and was marked in Kistna, Anantapur, North Arcot, Tanjore and Malabar. Compared with the previous fasli there was an increase in the percentage borne by the number of distraints and attachments to that of demand notices. There was a further fall, by 768, to 10,752 in the number of defaulters whose immovable property was attached and a satisfactory rise, from 23·42 to 36·45, in the percentage of those who paid the arrears before the sale notices were issued. The number of defaulters whose property was sold was greater than in the previous fasli. The percentage of actual sales to sale notices was 9·95 as against 5·55 in fasli 1326 and the percentage of defaulters whose property was actually sold to the total number of pattas was ·11 as against ·06 in the preceding fasli. Immovable property of the estimated value of Rs. 1·52 lakhs was sold for the recovery of arrears amounting to Rs. 0·37 lakh and realized Rs. 0·58 lakh, the corresponding figures for the previous year being Rs. 1·65 lakhs, Rs. 0·25 lakh, and Rs. 0·58 lakh. The prices fetched by lands sold to private individuals were lower than in the previous year both in the case of wet and dry lands. There was no appreciable change in the total area of dry lands bought in by Government for want of bidders, which amounted to 2,092 acres, but the extent of wet lands bought in increased, by 225 acres, to 469 acres.

Coercive processes

46. Transfers of revenue registration are effected by applications made through officers of the Registration department or direct to revenue officers or by revenue officers of their own motion. Under the first head the number of applications received fell, by 12,121 or 4·25 per cent, to 272, 931. The bulk of the decrease occurred in Kistna, Guntūr, South Arcot, Tanjore, Trichinopoly, Tinnevelly and Malabar. The number of applications coming under the second category also decreased, by 7,936 or 12·72 per cent, to 54,456. The decrease occurred mainly in Guntūr, Nellore,

Transfer of registration

North Arcot, Tanjore, Trichinopoly, South Kanara and Malabar. On the other hand the number of cases dealt with by revenue officers on their own initiative rose, by 2,809, to 23,125. The largest increase was in Tanjore. The total number of applications of all kinds to be dealt with in the fasli under report, including the number pending disposal at its beginning, was 453,040. Of these 334,763 were disposed of during the fasli, leaving a balance of 118,277 at its close. Of the total number disposed of during the fasli 11,483, or 3·43 per cent, were rejected.

Loans and advances

47. The advances made during the year under the Land Improvement Loans Act amounted to Rs. 1·98 lakhs and those under the Agriculturists' Loans Act to Rs. 6·27 lakhs. The aggregate amount advanced under both the Acts was thus Rs. 8·25 lakhs as against Rs. 7·44 lakhs in the previous fasli. The difference was the net result of an increase in the amount advanced in eight districts and a decrease in fifteen others. Towards the close of the fasli, the Government issued a press communiqué sanctioning the grant of loans to owners of coffee estates with a view to carrying the planters through the immediate difficulties created by the war. The rules under the Agriculturists' Loans Act were also revised so as to permit the grant of loans for the acquisition of land for house-sites and the building of houses thereon in villages declared by Collectors to be congested. Of the sums repayable during the year under the above two Acts on account of principal, 88·5 per cent under the Land Improvement Loans Act and 83·3 per cent under the Agriculturists' Loans Act were collected. Advances amounting to Rs. 21,405 and Rs. 15,130 under the two respective Acts were repaid by borrowers on account of loans, the repayment of which had not fallen due, while sums amounting to Rs. 1,453 under the first Act and Rs. 1,357 under the second Act were written off as irrecoverable. The aggregate amount of principal and interest repayable under both the Acts was Rs. 11·49 lakhs as against Rs. 11·31 lakhs in the previous year, of which 30·1 per cent was collected without resort to coercion and 50·6 per cent after the issue of demand; a sum of Rs. 0·61 lakh was realized after attachment but before sale, Rs. 425 by the sale of movable property, and Rs. 1,613 by the sale of immovable property. The balances outstanding at the end of the year was Rs. 1·57 lakhs as against Rs. 1·20 lakhs in the previous fasli, the arrears again being heaviest in Tanjore and Madura and also in Anantapur, Tinnevelly and Bellary. As in the previous year the sums advanced under both the Acts were devoted to objects intended for the benefit of agriculturists, such as the sinking of wells for irrigation, repair of existing wells, reclamation of land, installation of oil-engines and pumps and the purchase of cattle and seed grains.

SURVEYS (1918–19)

[*Report on the administration of the Survey, Settlement and Land Records Departments for the year* 1918–19 (*G.O. No.* 2163, *Revenue, dated the* 18*th September* 1919)]

Operations

48. All the six survey parties (including one solely employed on estate surveys) which were previously at work continued their operations during the year. But of the two Town Survey Detachments, that in the south was abolished from January 1919 for want of an adequate and continuous programme. No. I party was employed in Guntūr and Ganjām, No. II in Nellore, No. III in South Arcot and Madura, No. IV in North Arcot and Trichinopoly, No. V in South Arcot and No. VI in North Arcot and Tanjore. The Town Survey Detachment (North) was, as in preceding years, employed in the Circars and the Town Survey Detachment (South) in North Arcot, Chingleput, Coimbatore, Tanjore and Madura.

Parties

District operations

No. I party

49. The cadastral section of No. I party resurveyed under the Punganūr system, experimentally, the outstanding balance of fifty square miles in Rēpalle taluk, Guntūr district, and 313 square miles in Bāpatla under the so-called Diagonal and Off-set system. Street surveys were finished in

sixteen unions in the same district and were in progress in eight others. In the Vizagapatam district out of eight unsettled villages ordered for survey, only two aggregating one square mile were completed. In Ganjām the survey of three salt factories with their extensions was taken up and completed as also that of the Local Fund roads passing through the non-Government areas of the district. The Town Survey section of the party credited in all 13·06 square miles in Vizagapatam extension, Cocanada, Ellore extension, Bezwada, Guntūr, Narasaraopet and Tenali, completing all of them excepting the first and the last. No. II party was as in the previous year engaged solely on the survey of the Venkatagiri zamindari in the Nellore district, the total outturn for the year being 341 square miles. No. III party resurveyed 39 square miles in Gingee in the South Arcot district and turned out 304 square miles in Kallakurichi. In the Madura district it completed the cadastral survey of the Devastanam villages, the area credited during the year being 44 square miles. In Rāmnād it finished the survey of the Seithur zamindari, crediting an area of six square miles. The cadastral section of No. IV party resurveyed under the Punganūr system, experimentally, 247 square miles in Tiruvannāmalai taluk, North Arcot district, 111 square miles in Lalgudi, Trichinopoly district, and the block survey of four square miles of whole inam villages in the Mēlūr and Palni taluks of the Madura district. It also completed street surveys in two unions in the Rāmnād district and took up the experimental survey of a desam in the Nilgiri-Wynaad. The Town Survey section credited in all 10·84 square miles in Tiruvannāmalai, Dindigul, Dhārāpuram, Chingleput, and in Negapatam extension. All the towns assigned to the section were completed and it was disbanded from January 1919. No. V party resurveyed 331 square miles in Tirukkōyilūr taluk, South Arcot district, and completed the survey of Chennappanāyakanpālaiyam and Naduvirapattu estates in the Cuddalore taluk. It also did a very large amount of supplemental subdivision work in the taluks of Cuddalore, Villupuram and Tindivanam, and completed the survey of Marudalam-Muttavadi mutta in the Wallajah taluk of the North Arcot district. No. VI party resurveyed under the Punganūr system 20 square miles in Tiruvannāmalai taluk, North Arcot district, the total area credited being 241 square miles. In Tanjore it completed the resurvey of 240 square miles, in Tanjore (South), Pāpanāsam and Nannilam and finished the survey of the Palace Estate lands in the district, crediting an area of 31 square miles.

No. II party

No. III party

No. IV party

No. V party

No. VI party

50. The area of village maps printed during the year was 5,058 square miles as against 5,002 square miles in the previous year, including 1,010 square miles of proprietary villages and 47 square miles of Coorg Province. The maps printed during the year include revised touring maps (quinquennial issue) of four districts, a touring map of the Malabar district and three taluk maps, all on the basis of the Survey of India one-inch standard sheets, reprints of six taluk maps and street survey maps of 20 unions. The arrears of printing at the end of the year were 2,139 square miles as against 5,172 square miles in the previous year.

Central Office

51. The total outturn for the year comprised the initial survey of 24·73 square miles of Government lands and 426·1 square miles of estates, the resurvey of 1,658 square miles of Government lands, the block survey of four square miles of whole inam villages and the special cadastral survey of 23·90 square miles of municipal towns, besides the survey of streets in 36 unions and of six linear miles of roads. The karnams' contribution to survey work was generally very poor.

Outturn and outlay

52. The gross expenditure was Rs. 13·08 lakhs as against Rs. 11·81 lakhs in the previous year, of which Rs. 9·62 lakhs is chargeable to Government and Rs. 3·45 lakhs to proprietary estates, municipalities and other sources, the corresponding figures for the previous year being Rs. 8·51 lakhs and Rs. 3·30 lakhs, respectively. The amount chargeable to outturn was Rs. 11·86 lakhs as against Rs. 10·89 lakhs in 1917–18.

Finance

SETTLEMENTS (1918–19)

[*G.O. No.* 2163, *Revenue, dated* 18*th September* 1919]

Parties

53. All the five settlement parties which were at work at the end of the previous year continued their operations—Party No. I in the Tanjore district, Party No. II in the South Arcot district and in the Tiruvannāmalai taluk of the North Arcot district, Party No. III in Bellary, Party No. IV in Madura and Rāmnād, and Party No. V in Ganjām, Vizagapatam, Gōdāvari, Kistna and Nellore. The operations of Party No. III were extended to the Anantapur district and those of Party No. IV to the Trichinopoly district. The Special Settlement Officer employed in connexion with the resettlement of the Nilgiri and Malabar Wynaads continued throughout the year. The work of the department was to some extent retarded owing to the deputation of officers on military duty. In spite of this, the programme of settlement operations was realized during the year.

Districts

Ganjām

54. Proposals were approved during the year for the settlement of the Pondakhol mutta in the Goomsūr Agency of the Ganjām district and of the resumed inam village of Balajipuram in the Parlākimedi Maliahs. The paiks' inams in five villages of the Pālūru estate were localized and fair accounts supplied. The diglot registers of the resumed inam villages of Bejjiputti and Kumarasingi in the Kallikota estate were submitted together with a report on the introduction of settlement in those villages, and the disafforested blocks of the Runkuhanumantapuram

Vizagapatam

reserve in the Chicacole taluk were classified. In Vizagapatam the revision of adangals was completed in the remaining villages of the Palkonda, Sarvasiddhi and Golgonda taluks, while subdivisions were measured in the remaining villages of Palkonda and Sarvasiddhi and all the villages of Golgonda. A scheme report for the resettlement of the three Government taluks of the district was submitted and orders were passed thereon during the year. Fair adangals were prepared and supplied for the two whole inam villages in the district which were outstanding at the end of the previous year. Settlement registers were prepared for the remaining 27 whole inam villages and the registers of the 252 villages, which were outstanding at the end of the previous year, were checked and supplied. The minor inams in 13 whole inam

Bellary

villages of the Bimlipatam taluk were localized. In Bellary the revision of adangals was completed in 39 ryotwari and 15 shrotriyam villages in the Adōni taluk and 38 ryotwari villages in the Alur taluk, while subdivisions were measured in 44 ryotwari and eight shrotriyam villages in Adōni and 21 villages in Alur. Progress was made in the collection of the statistics required for the scheme report for the re-settlement of the taluks of Adōni, Alur, Siruguppa and Bellary in the Bellary district and

Anantapur

the taluks of Gooty and Tadpatri in the Anantapur district. The revision of adangals was started in the Gooty taluk and the work finished in 11

North Arcot

villages. In North Arcot the revision of adangals was completed in all the remaining villages of the Tiruvannāmalai taluk, including the Tenmalai Hill villages. Proposals for the resettlement of the taluk were submitted during the year. The classification of the Tenmalai Hill villages was carried out and a scheme for their settlement was submitted. The fair accounts of the two resumed inam villages of Vellakkuttai and Gollankuttai in the Tiruppattūr taluk were supplied. The diglot registers of these villages and a report on the introduction of settlement in them

South Arcot

were submitted. In the South Arcot district the revision of adangals was completed in the remaining 138 villages of the Kallakurchi taluk and in 147 villages of the Chidambaram taluk. The final scrutiny of survey records was carried out in the remaining villages of the Tindivanam taluk and in all the villages of the Gingee taluk. Field inspection preliminary to the introduction of resettlement was completed in the remaining 195 villages of the Tindivanam taluk and in the whole of the Gingee taluk. Rough pattas were issued for the remaining 82 villages of the Cuddalore taluk, the whole of the Villupuram and Tindivanam taluks

and 104 villages of the Gingee taluk. The hearing of objections to rough pattas was completed for the remaining villages of the Cuddalore taluk, the whole of the Villupuram and Tindivanam taluks and 75 villages of the Gingee taluk. Fair accounts were furnished for all the villages of the Cuddalore taluk, 222 villages of Villupuram and 66 villages of Tindivanam. In Tanjore the revision of adangals was completed in 50 villages of the Negapatam taluk, 46 villages of the Arantangi taluk and 76 villages of the Tanjore taluk. The final scrutiny of survey records was carried out in the remaining 31 villages of the Māyavaram taluk, 59 villages of Mannārgudi, 25 villages of Tanjore, one village of Pāpanāsam and 28 villages of Nannilam. The fair accounts of 175 villages in the Māyavaram taluk were supplied. The revision of adangals was started in the Lalgudi taluk of the Trichinopoly district during the last quarter of the year. In the Madura district the scrutiny of survey records was completed in the remaining two villages of the Madura taluk, 24 villages of Mēlūr and 25 villages of Tirumangalam. Field inspection preliminary to the introduction of resettlement was carried out in the remaining 24 villages of the Madura taluk, 68 villages of Mēlūr and 93 villages of Tirumangalam. Rough pattas were issued for 53 Periyār-affected villages of the Nīlakkōttai taluk, the whole of the Madura and Mēlūr taluks and 151 villages of the Tirumangalam taluk. The hearing of objections to rough pattas was completed in the remaining two Periyār villages of the Periyakulam taluk, 53 Periyār villages of the Nīlakkōttai taluk, the whole of the Madura taluk, 89 villages of the Mēlūr taluk and 151 villages of the Tirumangalam taluk. The fair accounts of the remaining villages in the taluks of Periyakulam and Nīlakkōttai and of 60 villages in Madura, 41 villages in Mēlūr and 71 villages in Tirumangalam were supplied. The diglot registers of one village of the Palni taluk, 29 villages of Periyakulam and 34 villages of Dindigul were also furnished. A report on the introduction of resettlement in the Dindigul taluk was also submitted. Orders were passed during the year on the scheme report for the resettlement of the four ayan villages of the Paramakudi taluk and of eight villages in the Aruppukōttai taluk of the Rāmnād district. The scrutiny of survey records and inspection by classifiers preliminary to the introduction of resettlement were completed in all the eight villages of the Aruppukōttai taluk. The diglot registers of all the 22 resumed inam villages in the Rāmnād and Sivaganga zamindaris were submitted. Inquiries into the economic conditions of the Nilgiri and Malabar Wynaads were carried out and statistics of lease and sale values of lands were collected. The revision of adangals and classification work were completed in the whole of the Gudalur taluk and were in progress in nine desams of the Wynaad taluk. Orders were passed during the year as regards the lines on which the resettlement should be conducted. An experimental survey of the Cherumulli desam was started during the year, but the work had to be stopped owing to a severe outbreak of malaria among the survey staff. Investigations were made into the method of assigning land and valuing trees in connexion with the application of the waste land and darkhast rules to the Wynaads and a report on the subject was submitted.

Trichinopoly
Madura
Rāmnād
The Nilgiris
Malabar

55. During the year 99 manuscript registers were received, 91 were scrutinized, 75 were printed and 1,202 issued to Collectors. **Registers**

56. The total expenditure was Rs. 5·56 lakhs as against Rs. 5·09 lakhs in the previous year. A sum of Rs. 1·28 lakhs was spent on the controlling office as against Rs. 1·68 lakhs in 1917–18. The cost of printing and binding settlement registers fell from Rs. 0·54 lakh to Rs. 0·05 lakh, while expenditure on settlement parties rose from Rs. 2·86 lakhs to Rs. 4·22 lakhs. **Finance**

LAND RECORDS (1918–19)

[*G.O. No.* 2163, *Revenue, dated the* 18*th September* 1919]

General

57. Land Records staffs were working throughout the year in all the districts of the Presidency. In the districts of Madura, Rāmnād, North Arcot and Tanjore operations preliminary to maintenance were in progress in some of the taluks. In South Arcot, which had been under resurvey, pre-maintenance work was started in the Cuddalore taluk in the last quarter of the year. In the remaining taluks of this district, in the delta taluks of the Guntūr district and in the Tiruvannāmalai taluk of the North Arcot district the Land Records Inspectors were employed on the revision of the village registers preparatory to resurvey. In the remaining districts the staffs were mainly employed on regular maintenance. The work of the department was satisfactory.

Maintenance

58. Good progress was made during the year in the check-measurement and mapping of subdivisions. The balance brought forward in Tinnevelly was exceptionally large and the number of cases sanctioned during the year was, as usual in this district, a long way above the average. The work was, however, dealt with very satisfactorily and the balance substantially reduced. Good work was also turned out in Chingleput where the number of cases sanctioned is always above the average. The number of cases sanctioned in South Kanara was, however, the greatest of any and this was due to the practice of splitting up 'hill numbers' which is likely to continue for some years yet. Generally the number of subdivisions sanctioned was on the increase, and rather markedly so in the southern districts. It was most noticeable in Bellary, Chingleput, North Arcot, Tanjore, Trichinopoly, Rāmnād and Coimbatore. There was improvement in the quality of the work incorporated in the maintained records and this was due to the increased scrutiny to which the sketches were subjected before incorporation in the taluk copies of the field measurement books. The maintenance of village maps continued to be under the direct supervision of the Land Records Tahsildar and to be carried out almost entirely for the purpose of reprinting as the existing stock became exhausted. The progress made in the repair and renewal of survey marks was on the whole an improvement on that of the previous year. The outturn was satisfactory in the districts of Vizagapatam, Chittoor, Kurnool, Cuddapah, Nellore, North Arcot, Trichinopoly, Tanjore, Rāmnād and Coimbatore, while that of ryots' repairs was good in Chittoor, Kurnool, Chingleput, North Arcot, Trichinopoly, Tanjore and Coimbatore. As regards actual balances the average for the whole Presidency was satisfactorily reduced and at the end of the year was well below six per cent. Only nine districts exceeded this average. A great deal remained to be done in most districts in the way of stimulating ryots' repairs. Karnams, as survey officers, made no very appreciable inroads on arrears though a little was done by them in Coimbatore and some useful work in Kurnool. Map and stone maintenance in surveyed towns and unions continued in a generally satisfactory condition and the appointment of additional surveyors for some of the larger towns has enabled the latter branch of work to attain a relatively high standard.

Training of staff

59. Schools for the training of Revenue subordinates and karnams were held, as usual, in various districts. A school for the training of Land Records Tahsildars in survey and maintenance was held during the year. All the candidates received a thorough grounding in the main principles of the work they will have to carry out and the results were more successful than those of the previous year's school. As a result of the decision of Government to exempt from training all Deputy Collectors except those who were appointed by direct recruitment no special school for gazetted officers was necessary; one probationary Deputy Collector and one Assistant Collector were, however, trained for a month by an Assistant Director.

WASTE LANDS

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Season and Crop Report for the agricultural year* 1918–19]

60. The total area of the Presidency is 89·649 million acres as against 89·702 million acres in the previous year, of which a net extent of 31·770 million acres was under cultivation, 12·945 million acres were classed as forest and 22·002 million acres were not available for cultivation. Of the remainder 10·587 million acres were fallow as against 9·075 million acres in the previous year and 12·346 million acres formed culturable waste other than fallow as against 11·593 million acres in 1917–18.

GOVERNMENT ESTATES

61. There is nothing to record under this head.

WARDS' ESTATES

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Report on the administration of the estates under the Court of Wards in the Madras Presidency for fasli* 1327 (1917–18)]

Estates under management

62. Two estates were restored to their proprietors during the year, viz., Nandigama in Ganjām and South Vallūru in Kistna, and an equal number was taken over, viz., the estate of Nawab Saiyid Muhammad Sahib Bahadur in Madras and North Arcot and the Talaivankōttai estate in the Tinnevelly district. Thus the total number of estates under the superintendence of the Court of Wards at the close of the fasli was the same as in the previous year, viz., twenty.

Finance

Demand, collection and balance

63. The gross current demand of the estates amounted to Rs. 20·01 lakhs and the net demand, excluding seasonal and other remissions, to Rs. 19·88 lakhs, the corresponding figures for the previous year being Rs. 22·53 lakhs and Rs. 22·11 lakhs, respectively. The collections amounted to Rs. 17·36 lakhs and a sum of Rs. 0·04 lakh was written off, leaving a balance of Rs. 2·48 lakhs at the end of the year. Deducting collections, remissions and amounts recommended to be written off, the net recoverable balance was Rs. 1·81 lakhs, or 9·08 per cent of the demand as against 8·5 per cent in the preceding year. There were again no outstanding balances in Kadambūr and Timmajiamma's estates. In Madukur, Nawab's estate and the Zamorin's estate the balance exceeded 25 per cent. In the first named estate, collections were reported to be specially difficult because of the general poverty and indebtedness of the ryots, and an investigation has been ordered into the rates of rent payable by the tenants and the reasons for their excessive poverty. The total arrear demand at the beginning of the fasli amounted to Rs. 10·48 lakhs, of which Rs. 7·23 lakhs were outstanding at its close. In five estates the arrears exceeded Rs. 15,000. The aggregate cash balance of all the estates, excluding Nandigama and South Vallūru, was Rs. 7·50 lakhs at the beginning of the fasli and the total cash receipts Rs. 24·28 lakhs; the total assets of the fasli in cash were therefore Rs. 31·78 lakhs. The expenditure of the year amounted to Rs. 24·62 lakhs, leaving a cash balance of Rs. 7·16 lakhs at its close. The total closing balance to the credit of the estates was Rs. 15·68 lakhs, including Government promissory notes and other securities and the estimated value of grain on hand, the corresponding figure for the previous year being Rs. 17·12 lakhs. The ordinary cash receipts and charges amounted to Rs. 20·78 lakhs and Rs. 15·63 lakhs as against Rs. 23·10 lakhs

and Rs. 16·17 lakhs in the preceding year. Surplus balances exceeding a lakh of rupees were, at the end of the year, held on behalf of Kallikōta-Atagada, Mādugula, Kangundi, Arni, Sāptūr, Ūrkkādu and Ūttumalai. In Kallikōta-Atagada the construction of a veterinary hospital was sanctioned and the investigation of two useful irrigation projects was ordered. In Mādugula a programme for improving river channels was drawn up and the work will be started soon. The question of having the estates surveyed was under consideration and a loan of Rs. 30,000 was granted to Sivaganga estate. The surplus balance of the Arni estate will, for some years to come, be wholly required for the discharge of the debts. The surplus funds in Sāptūr were reserved for sinking wells in pannai lands, for the payment of a contribution of one-half of the cost of a local fund dispensary to be constructed in Sāptūr and for meeting the expenses of the marriage of the ward's sisters. Portions of the balance in Ūttumalai and Ūrkkādu have been invested in the Indian War Loans. In the former estate the construction of a veterinary dispensary at Virakeralampudur was sanctioned during the year. The average percentage, for all the estates, of the establishment charges and Government commission to the normal receipts again rose from 15·7 to 16·5. It exceeded the prescribed maximum of 12 in all the estates excepting one. In most of them it was not possible to curtail the establishment charges without impairing the efficiency of the administration. In three the percentages were very high, viz., Madukūr (41·8), Sivaganga (40·9) and the Zamorin's estate (25·7).

Surplus balances

Establishment charges

Works

64. Including the devastanam and chatram sections in estates in which these sections have separate endowments, the total allotment for maramat works in all the estates was Rs. 3·80 lakhs, of which Rs. 3·29 lakhs, or 86·6 per cent, was actually spent during the year as against 69·2 per cent in the previous year. Including the aggregate value of work done but not paid for within the fasli, the total value of the work executed during the year was Rs. 3·73 lakhs or 98·2 per cent of the allotment, the percentages for the two previous years being 81·4 and 92·5. Of the total expenditure a sum of Rs. 1·48 lakhs was spent on irrigation works, Rs. 1·21 lakhs on buildings, Rs. 0·18 lakh on roads and other works and Rs. 0·42 lakh on establishment and contingencies. The aggregate outlay was 15 per cent of the ordinary charges of the year as against 16 per cent in the previous fasli and 19·4 per cent in fasli 1325.

Debts

65. The aggregate amount of debts due to the several estates, excluding Nandigama and South Vallūru, was Rs. 1·66 lakhs, of which Rs. 0·61 lakh was collected and Rs. 0·02 lakh written off, leaving a balance of Rs. 1·03 lakhs appertaining to fourteen estates. In Kallikōta-Atagada the outstanding debts were again large. Including debts newly brought to account (Rs. 0·36 lakh) and the interest and costs which accrued during the year (Rs. 0·94 lakh), the total liabilities amounted to Rs. 14·43 lakhs, of which Rs. 2·19 lakhs were repaid and Rs. 0·30 lakh struck off, leaving a balance of Rs. 11·94 lakhs which was payable by nine estates. As in the previous year they were heaviest in Arni (Rs. 6·74 lakhs as against Rs. 7·11 lakhs in the previous year) and exceeded Rs. 1 lakh in Madukūr, Kadavūr and the Zamorin's estate. All possible measures were adopted to improve the financial condition of the Zamorin's estate and it is hoped that, with the increased income consequent on the collection of renewal fees and the improved working of the forests, it will be possible not only to prevent further indebtedness but also to discharge the outstanding debts gradually. The proprietor of Kadavūr, on whose application the management of the estate was taken over by the Court of Wards, died in September 1918, and the Court continued its superintendence of the estate on behalf of the eldest son of the deceased, who is a minor. The provisions of section 45 of the Madras Court of Wards Act, 1902, were extended during the year to the Arni estate and the Nawab's estate. It is hoped that the debts due by the former will be paid off out of the revenues within the next eight or ten years. The liabilities of the Nawab's estates were under investigation during the year.

Debts due to the estates

Debts due by the estates

Encumbered estates

66. During the year, the Kadambūr and Pedda Merangi wards and three others, not wards of the Court, viz., two sons of the Jaghirdar of Arni and Vadasseri Mannadiar, a relative of the Raja of Kollengode, joined the institution. The Kangundi ward left Newington in December 1917 to receive instruction in estate management, and the Kurupam and Dhārakōta minors were withdrawn. The number of pupils in residence at Newington at the close of the fasli was therefore ten. The educational progress of all the minors was generally satisfactory. The Kallikōta ward passed the Intermediate examination held in March 1918, with distinction in Oriya. The minors benefited considerably by their stay in Ootacamund and their general health and conduct continued to be good. **Education of the wards**

67. The financial condition of the religious and charitable institutions attached to the estates was generally sound and the educational institutions maintained by some of the estates continued to do good work. In the second-grade college maintained by the Zamorin's estate the results of the School Final and Intermediate examinations were disappointing, but the percentage of passes at the former was higher than the Presidency average. The Raja's High School, Sivaganga, improved in strength and the results of the School Final examination were satisfactory. The forests in all the estates continued to be worked as usual. Working-plans for the Kangundi and the Sāptūr forests were prepared and approved, and proposals for the proper management of the forests in Arni and Nawab's estates were under consideration during the year. The scheme of settlement of the Kallikōta-Atagada estate was dropped as the results of an experimental settlement conducted in a few of the villages were discouraging and as the conditions of the estates' finances were uncertain. In addition to the investments already made in the First Indian War Loan, the more solvent of the estates under the Court's management made further contributions towards the loan during the year. **Miscellaneous**

REVENUE AND RENT-PAYING CLASSES

(FASLI 1327—1ST JULY 1917 TO 30TH JUNE 1918)

[*Report on the Settlement of Land Revenue for fasli* 1327]

68. The principal revenue-paying classes of the Presidency are the zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The approximate area of the zamindaris in fasli 1327 was, as in fasli 1326, 19,085,910 acres, the total estimated revenue realized and the peshkash being Rs. 2,42,94,630 and Rs. 49,92,012. The quit-rent payable on shrotriyam villages was Rs. 7,56,655. The total extent of ryotwari holdings was 25,887,479 acres, or an increase of about 0·3 per cent over that of the previous year, and the assessment thereon amounted to Rupees 5,22,59,784, which formed about 74 per cent of the land revenue. The number of ryotwari villages fell, by 11, to 22,313, the decrease being the net result of decreases in Trichinopoly and Madura and an increase in Salem. **Revenue-paying classes**

69. Tenants in zamindari and whole inam villages constitute the rent-paying classes. As in the previous year subletting was resorted to in ryotwari tracts chiefly by those engaged in professions other than agriculture or by large landholders. It was on the increase in the Madakasīra taluk of the Anantapur district and on the decrease in the Kāvali and Atmakūr divisions of the Nellore district owing, in the latter case, to the rise in the prices of food-grains. The Madras Estates Land Act (I of 1908) was on the whole working smoothly. **Rent-paying classes**

CHAPTER III

PROTECTION

LEGISLATING AUTHORITY

70. *Vide* pages 128 to 131 of the Report on the administration of the Madras Presidency for the year 1911–12.

COURSE OF LEGISLATION (1918–19)

Legislative Council

71. Twelve vacancies occurred during the year among the official Additional Members of the Legislative Council. Ten were due to retirement, transfer or leave and the rest were consequent on the elevation of two officials to the Executive Council. Among the non-official Additional Members there were two resignations, one by the representative of the Madras Trades Association on the ground of ill-health and the other by the representative of the University of Madras on his leaving India. All these vacancies were duly filled. In February 1919, two more members (an official and a non-official) having expert knowledge of the subject of the Madras City Municipal Bill were nominated to the Council for the period the Bill was under its consideration. The term of office of these two members expired in the second week of March 1919 when the Bill was passed into law. Twenty-six meetings of the Council were held during the year, including twenty adjourned meetings. Two of these were specially called for in October 1918 for the purpose of discussing the lists of 'transferred' and 'reserved' subjects referred to in the Report on Indian Constitutional Reforms. The average attendance of Additional Members was 37·8 (13·8 official and 24·0 non-official) as against 38·9 (13·4 official and 25·5 non-official) in the previous year.

Acts and Bills

72. Seven Acts were passed during the year, viz., (1) the Mappilla Succession Act, 1918, amending and defining the law applicable to intestate succession among the Mappillas governed by the Marumakkattayam or the Aliyasantana law of inheritance, (2) an Act to declare the Doddappanāyakkanūr and Vuyyūru estates to be impartible estates within the meaning of the Madras Impartible Estates Act, 1904, (3) the Madras Prevention of Adulteration Act, 1918, applying to such local areas as the Local Government may by notification in the *Fort St. George Gazette* direct, and in respect either of all food or such as the Local Government may specify in the notification, (4) the Koodalmanickam Devaswom Act, 1918, providing for the management in certain circumstances of the properties vested in the Koodalmanickam Devaswom in Irinjalakuda in the Native State of Cochin, (5) an Act amending the Madras Port Trust Act, 1905, in certain particulars, (6) an Act for the prevention of the spread of insect pests, plant diseases and noxious weeds, and (7) the Madras City Municipal Act, 1919, consolidating and amending the law relating to the municipal affairs of the City of Madras. By far the most important of these enactments was the last-mentioned Act which gives effect to the recommendations of the Decentralization Commission in regard to the control of the Local Government over the City Municipal Corporation. It confers on the Council full control over taxation and the budget, subject only to

statutory limitations, and full powers in regard to the staff, subject to the right of the Local Government to exercise a veto in the case of certain high officials. It further gives effect to a comprehensive scheme of decentralization recommended by the Corporation and transfers many powers from the Local Government to the Council and from the Council or the Standing Committee to the Standing Committee or the Commissioner, respectively. It also increases the borrowing powers of the Corporation and authorizes it to raise certain new taxes. In addition to the above enactments passed during the year, leave was granted to a non-official member of the Council to introduce a Bill to provide for the voluntary registration of Mussalman marriages and divorces in the Madras Presidency on the lines of the Bengal Muhammadan Marriages and Divorces Registration Act, 1876.

Government of India

73. No draft Bills were sent by the Local Government to the Government of India for introduction in the Imperial Legislative Council.

POLICE (1918)

[*Report on the administration of the Police of the Madras Presidency for the year* 1918; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Police*]

Administrative changes

74. The Superintendent's charge in the Guntūr district was reconstituted during the year. The Nāmakkal taluk, transferred from Salem to Trichinopoly some years ago, was, with the exception of a small tract of country, retransferred to the former district. The scheme of working, partially or entirely, without Circle Inspectors was continued in the districts of Trichinopoly, Kurnool and Coimbatore. Changes among district officers were more numerous than in 1917. Five more officers joined the Indian Army Reserve of Officers, thus bringing the total number on military duty to 19. Thirteen subdivisions remained vacant owing to the paucity of officers. Two Superintendents continued to be on duty outside the department, one in the Jail department and the other in connexion with the settlement of a criminal tribe. The services of a third Deputy Superintendent were lent to the Military department to assist in the work of recruiting for the Army; but all the three Deputy Superintendents employed on this duty were released from it before the close of the year. Two officers of the Imperial Police and three of the Provincial service retired during the year and one Deputy Superintendent died. A junior member of the landed aristocracy, who had been serving in the department as an honorary Deputy Superintendent since 1915, was appointed to the Indian Police. An Additional Assistant Commissioner of the rank of Deputy Superintendent was created in Madras City for the control of crime.

The Police force

Strength

75. There was a slight fall, by 187, to 32,785 in the sanctioned strength of the permanent force which was mainly due to the reduction effected in the strength of the constabulary in Madras City for the purpose of raising their pay. The shortage of men in the force was unprecedented, the number of vacancies at the end of the year being 1,551, or 374 more than in the previous year. Primarily this was due to the competitive demands of the Army. Secondly, the economic situation grew so acute that the conditions which militated against recruitment in previous years became more pronounced. An interesting experiment was inaugurated during the year by the introduction in the Coimbatore district of a new class, styled 'Nayaks,' intermediate between the head constable and the constable, the last-named officer to be employed on beat, patrol, guard, process service and other mechanical duties and the nayak to be entrusted with criminal investigation and other similar work demanding intelligence, integrity and individual talent. The health of

Health

the force suffered exceptionally from epidemic disease, particularly influenza, the daily sick-rate rose appreciably and the mortality was more than double that of the previous year, the percentage to the actual strength being 2·7 as against 1·1. In spite of many adverse circumstances there was no falling off in discipline: on the contrary a reduction in the percentage of punishments was found necessary. There was a slight rise in the percentage of punishments for absence without leave and a fall in that of punishments for other offences. The number of dismissals and suspensions decreased, the former appreciably and the latter slightly. There was some fall in the proportion of blackmarks awarded and the practice of awarding deferred punishments was again freely employed. Judicial punishments showed a further decline, but there was a slight increase in the number of convictions for extortion and in those under the Police Act. Four officers were awarded the King's Police Medal and a fifth received the title of Rao Sahib. The number of police officers rewarded by promotion was 20 as against 51 in 1917, but there was a further satisfactory increase both in the number of police officers and private individuals who received money rewards and in the amount paid to them. The largest amount in rewards was, as in the preceding year, disbursed in Coimbatore where preventive work received greater attention and a larger amount of co-operation was forthcoming from the public than in other districts. In many of the latter, however, there was evidence of improvement in detection or prevention in proportion to the increase in the amount of rewards granted, especially to village officers and private individuals. There was no noticeable variation in the percentage of head constables and constables who were classed as illiterate. The Provincial Training School, Vellore, recorded another year's useful work. One of the two Probationary Deputy Superintendents who were in the school at the beginning of the year was posted to a district to undergo practical training. No gazetted officer was deputed to the school for training during the year. The maximum period of training of Sub-Inspectors in the school was raised from one to two years so as to enable those who fail to pass the theoretical part of the final examination held at the end of the year to be detained until they pass the subjects they failed in, examinations being held every six months for the purpose. The Sub-Inspectors in the school were generally shaping well as regards manliness and smartness, but their book work was disappointing owing to imperfect knowledge of English on the part of the great majority of them. Although instruction in shorthand has been imparted in the school for over ten years, the supply of qualified reporters has been singularly inadequate. Instruction in "First-aid to the injured," riding and *Jiu Jitsu* continued to be given. A pass in the first named subject was made compulsory, but the results of the examination held were disappointing. The school for the training of the recruits at Vizianagram was closed as the buildings were required by the Military department. The other three schools were working throughout the year.

Conduct

Education

Village police

76. The number of village officers rewarded during the year rose, by 189, to 941 and the amount of rewards disbursed, by Rs. 2,168, to Rs. 7,758 and there were indications of more co-operation on the part of village magistrates, the result of a prompter appreciation of their services by the higher police officers. Village-visiting by officers of all ranks was not satisfactory and instructions were issued to gazetted officers during the year pointing out the necessity for their setting an example in this direction by themselves spending as much time as possible in villages in their jurisdiction. Some further progress was made in regard to providing ghat talaiyaris with huts and lands for cultivation.

Armed reserves

77. The reserves were generally kept up to strength and in an efficient condition, but there was a serious deterioration in the personnel, particularly the Sergeants, owing to war conditions. All but the Bellary Reserve were mobilized and the orders regarding mobilization were carried out. In addition special mobilization was carried out in many districts on account of the synchronization of the Muharram and

Dasara festivals and the disturbed condition of the country due to high prices.

78. Crime on the railways increased chiefly under the head of theft. Thefts of railway materials were again numerous, but they were kept down on the South Indian Railway by a system of armed patrols at various centres and the practice, introduced in the previous year, of the joint checking of carriage fittings by the railway police and the railway staff. Thefts in goods sheds and station yards were put down on the Madras and Southern Mahratta Railway by means of efficient patrols. The amount of property lost was larger than in 1917, but the amount recovered was proportionately higher. There was a further satisfactory decline, from 603 to 425, in the number of shortages and this was due to the exercise of greater care and discrimination on the part of the Railway authorities in preferring complaints. The system of independent seal-checking of wagons by the Railway Police, Madras, which facilitates the localization of thefts from goods trains, was working satisfactorily during the year. Crime was well handled and detection showed an improvement. There were no noticeable variations either in the number of attempts to derail trains or in that of cases of stone-throwing. The relations between the railway police and the railway staff on the one hand and the district police on the other continued to be generally harmonious. **Railway police**

79. The economic conditions of the year under review were most unfavourable and abnormal. During the latter half of it a pandemic of influenza swept the country causing terrible mortality and was followed by other epidemic diseases. Prices of all articles rose steadily and as the year advanced there was keen distress among the lower classes which culminated in many places in food riots. It is not surprising, therefore, that there was an abnormal increase of crime, which reached a level unsurpassed during the last forty years. Grave crime rose, by about 6,000, to nearly 43,000, the increase occurring under all heads, more especially under house-breaking and theft. Murders again rose, the number, which beats all past record, being 893 as against 728. Coimbatore, as usual, occupied the premier place with Madura as second. Cuddapah and Salem came next. In most of these districts party feeling runs high and slight causes lead to bloodshed and murder. A large proportion of murders was due to causes connected with sexual relations. Dacoities and robberies rose, the former, by 455, to 879 and the latter, by 162, to 1,052. For the most part the increase was undoubtedly due to the prevailing economic distress which drove the poorer classes to crime. The situation kept the country in a state of continuous ferment and popular risings took place in no less than twenty-two districts in September. Most of these were small disturbances in which the hungry populace turned out to plunder granaries and shops. Considerable apprehension was felt about the maintenance of the public peace and the police had an anxious time. In Madras City the disturbances were on a large scale and affected most parts of the town lasting for about three days. The building adjoining the Moore Market was burnt down and much damage was caused by the looters who were mostly labourers and mill hands. Military pickets had to be posted in different parts of the City to allay the panic ; the City Police of all ranks did very good work in this crisis and the capable handling of the situation by the Commissioner of Police deserves high praise. Other places where looting was serious were Conjeeveram in Chingleput and Sūlūrpet in Nellore. By far the most serious riot of the year occurred on the 17th September at Kamudi in the Rāmnād district, and was a recrudescence of the longstanding antagonism between the Maravars and the Shanars. Owing to the disturbed condition of the area and the unlikelihood of the feud between the two rival communities dying out, a force of additional police was established at Kamudi. Another case of unrest among the people which is deserving of mention is that consequent on the trial for sedition in September of one P. Varadarajulu Nayudu, who delivered a series of lectures at Madura **Statistics of crime**

during the strike at the local mills. He was prosecuted and sentenced to fifteen months' rigorous imprisonment by the Subdivisional Magistrate, Madura, but the conviction and sentence were reversed by the High Court on a technical ground. Twenty-five true cases of coining were dealt with in the year as against 37 in 1917, and seven ended in conviction. A man in the Gōdāvari district manufactured two-anna pieces and got his son to utter them. Both these offenders were under trial.

Detection and prevention of crime

80. The final year of the war imposed upon all ranks of the police a severe burden of extraneous duties and a depleted staff was called upon to face a heavy outburst of crime. Notwithstanding this circumstance, the proportion of true cases of cognizable crime under the Indian Penal Code which ended in conviction to those disposed of during the year remained the same as in 1917, viz., 31·1 per cent. The work of Sub-Inspectors was on the whole favourably reported upon. Their defects, however, continued and consisted chiefly of lack of initiative and inability to collect information. The power to refuse investigation under section 157 (*b*), Criminal Procedure Code, was again more freely exercised, the percentage of cases so dealt with being 9·2 as against 7·9 in the previous year. The highest percentages of refusals were in complaints of hurt, a compoundable offence, and theft. There was a satisfactory fall in the number of cases referred to the police by magistrates under section 202 of the Code of Criminal Procedure. The number of cases struck off as wilfully and maliciously false declined again slightly. As might be expected in a year of heavy crime, the amount of property lost was very high, a large proportion of the loss occurring under house-breaking and theft; but the percentage of recovery was also higher than in the previous year. The Police prosecuting staff continued to be inadequate almost everywhere and proposals were under consideration for strengthening it in certain districts where addition was most pressing. The number of suspects and receivers newly brought on the register was 416 and 24 respectively more than in the previous year, while the number of known depredators so registered was seven less. Special dark night patrols to villages where bad characters reside were put in force. The establishment of a number of temporary outposts was a special feature of the preventive work of the year. These outposts are easily shifted to localities where increased police attention is required and involve the minimum of extra expenditure. Their location on the routes of gangs has checked a quantity of gang crime; bad characters are better supervised and the working of the provisions of section 10 (*a*) (reporting at fixed intervals) of the Criminal Tribes Act is rendered easier and more efficient. The Criminal Tribes Act was extended to 13 more criminal tribes and the provisions of section 10 (*a*) were applied to a number of tribes notified under the Act. The number of persons registered under the Act was 3,909 as against 5,303 in the previous year and the number convicted was 2,147 against 1,711. There was not much variation in the total strength (1,046) at the close of the year in the schools in the various settlements.

Preventive work and criminal gangs

Criminal Investigation department

81. The services of a Deputy Superintendent were lent to the Ceylon Government for six months to watch suspected persons passing through Colombo. Certain seizures of seditious literature were made, most of it coming, as usual, from Pondicherry. No new productions of importance, however, came to light. The members of the Criminal Investigation department were employed on various confidential inquiries, in the investigation of several cases of cheating and forgery, a theft from railway mail and on an inquiry about a gang of Bhamptas. Inquiries into the circulation of counterfeit coins continued to be made. The temporary additional staff sanctioned for the finger-print bureau was entertained in the beginning of the year and its continuance for another year was also sanctioned. There was a further fall, by 619, to 14,709 in the number of references to the bureau as also in the percentage of investigations which stood at 21·6 as against 23·7 in the previous year. The number of finger impression slips received for record was 15,148, or 1,879 more than in 1917, and the total at the end of the year was nearly 187,780.

Finger-print bureau

82. The cost of the department for the official year 1918–19 was Rs. 102·70 lakhs. This figure is provisional and does not admit of definite comparison with that of the previous year. Roughly, however, there was an increase of over two lakhs, the bulk of which was due to the grant of war allowances to all low-paid subordinates. Finance

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CRIMINAL JUSTICE (1918)

[*Statistics of the Criminal Courts in the Madras Presidency for the year 1918; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Criminal Justice*]

83. There were several changes in the number of courts which exercised criminal jurisdiction during the year. The number of Additional Sessions courts and Additional District Magistrates' courts each rose by one, the increase in the case of the latter being due to the appointment of the Personal Assistant Deputy Magistrate of Salem as Additional District Magistrate. There was an increase of five in the courts of Assistant and Deputy Magistrates without divisional charges, and of 17 in the courts of Subordinate Magistrates of which 13 occurred in those of Tahsildar-Magistrates. The number of Honorary Magistrates' courts decreased from two to one while that of Special Magistrates' courts rose from 81 to 83, the additions in the latter case being due to the appointment as Special Magistrates of the Huzur Sarishtadar in the Rāmnād district and of the Municipal Chairman at Bezwada. Seven new Bench courts were established during the year and the number of Honorary Magistrates who had seats on them rose, by 25, to 1,012. The other classes of criminal courts which exercised jurisdiction, except village magistrates' courts, remained the same as in the previous year. The four Benches of Magistrates established for the town of Madras worked throughout, and on the last day of the year 87 Honorary Magistrates, or nine less than in the previous year, had seats on them. These tribunals again rendered a substantial measure of assistance to the stipendiary magistrates, although the total outturn of each of them was less than that of 1917. There was a fall, by 177, to 3,808 in the number of village magistrates who exercised criminal jurisdiction in the year. The number shows a higher fall (501) in comparison with the average for the preceding five years (4,309). The general explanation offered for the continued decrease in the assistance rendered by these courts is the want of public confidence in the capacity and integrity of village magistrates, the reluctance of the latter to devote proper time and attention to this branch of their duties and the tendency of villagers to exaggerate their complaints. It is anticipated that this state of affairs may undergo a change for the better when the Village Courts Act Amendment Bill becomes law. The total number of original cases instituted in all the criminal courts in the year was nearly 280,000 or about 39,000 less than in the previous year, and the total number of appeals preferred fell from about 9,700 to about 8,800. General

84. The number of cases instituted in village magistrates' courts fell, by 1,403, to 10,545 and the number of persons tried by those courts also fell, by 3,543, to 17,411. The percentage of conviction was 16·71 as against 16·06 in the previous year. In the regular magistrates' courts 236,592 cases, or 23,956 less than in the previous year, were instituted, the pendency at the end of the year rising slightly, by 611, to 4,879. The average duration from the beginning to the end of trial of cases disposed of by these courts was 8·1 days as against 7·3 in the previous year. Before Bench courts the average duration was two days, before Special Magistrates four, before Sub-Magistrates 11, before Assistant Magistrates 18, before Joint Magistrates 27 and before Deputy Magistrates 31. The attention of District Magistrates and Sessions Judges has been drawn in successive years to this unsatisfactory feature of an almost all-round rise in the average duration of cases; but these repeated strictures have failed to produce Original cases Village courts Regular Magistrates' courts

any effect. It is gratifying to note that special efforts were made by the District Magistrate of Kistna to effect a substantial reduction in the average duration of cases in his district. There was a fall in the total number of cases instituted in the Presidency Magistrates' courts. This was chiefly remarkable under the City Police Act and was due to the pre-occupation of the police in other matters during the year and to deficiency in staff. There was no noticeable variation in the number of cases (1,459), which were committed to Sessions courts in the mufassal. The total number pending in all these courts further rose from 81 to 96 to which Salem contributed the largest number, namely, 18. The average duration of cases before Sessions courts further rose from 43 to 54 days. It was again highest in South Arcot, being 175 days as against 72 in the previous year. This was due to the fact that several cases of 1917 were not disposed of until late in the succeeding year. Of those under trial 48·09 per cent were discharged or acquitted as against 45·34 per cent in the previous year. The number of cases committed to the High Court Sessions was 46, or eight more than in 1917, and nine cases were pending at the end of the year.

Sessions courts

The High Court

Appeals

85. There was a further fall, by 1,212, to 12,327 in the number of persons who appealed to first-class magistrates against the decisions of second and third-class magistrates and the appeals of 621 persons were pending at the end of the year as against 756 at the end of 1917. The average duration of an appeal in the courts of subdivisional magistrates remained the same as in the previous year, namely, 19 days, as also the percentage (32) of successful appellants. The number of persons who appealed to Sessions courts against the decisions of first-class magistrates fell, by 352, to 2,313, while the pendency (161) at the end of the year remained almost the same as in 1917. The average duration of an appeal rose from 23 to 29 days. It was again highest in South Arcot (62 days). The percentage of successful appellants was 20·22 as against 20·8 in 1917. The number of appellants to the High Court again rose, by 174, to 1,218. The Government appealed against the acquittal of 71 persons as against 62 in the previous year, the average for the preceding five years being 46. Of these 1,289 persons, the appeals of 564 were rejected *in limine*, the conviction of 58 was set aside, the orders of acquittal of 18 persons concerned in the appeals preferred by Government were reversed, the sentences on 282 were confirmed after notice, and those on 103 were reduced or otherwise altered and new trials or further inquiry was ordered in the case of 21 persons. The appeals of 243 persons including one concerned in the Government appeals were pending at the end of the year against 145 in 1917. The average duration of an appeal rose from 52 to 54 days.

Magistrates' courts

Sessions courts

The High Court

Reference and revision

86. The number of applications for revision presented in the District Magistrates' courts was 598 as against 630 in the previous year. The number of cases which these magistrates took up *suo motu* or on reports from subdivisional magistrates further fell from 29 to 18. In Sessions courts 426 applications for revision, or 29 less than in the previous year, were presented, and the number of cases taken up by these courts *suo motu* rose, by four, to 63. The High Court received 761 revision petitions, or 108 less than in the previous year; 100 cases were reported by District Magistrates and Sessions Judges and 48 were taken up by the High Court *suo motu*. Of the 108 persons whose death sentences were referred to the High Court for confirmation under section 374 of the Code of Criminal Procedure, the sentences on 68 were confirmed, those on 12 were commuted to transportation for life, those on three to rigorous imprisonment, and 25 persons were acquitted. Sessions Judges referred the cases of 80 persons to the High Court under section 307 of the Code of Criminal Procedure as against 39 in the previous year and that court upheld the verdicts on 46 persons as against seven in the previous year and reversed those on the remainder.

The jury system

87. The number of persons tried by jury rose, by 337, to 1,427 and in the case of 1,293 persons the Judge approved of their verdict. Assessors tried 1,831 persons as against 1,745 in the previous year and the Judge agreed

with all of them in the case of 1,192 persons as against 1,149 in 1917. The majority of the Sessions Judges consider that the jury system worked well during the year, an opinion which appears to be borne out by the high percentage of cases in which the verdict of the jury was accepted by the Sessions Judge or upheld on a reference to the High Court.

Miscellaneous

88. An unsatisfactory feature of the year is an increase in all courts except those of joint magistrates in the number of witnesses detained for more than three days. The attention of District Magistrates and Sessions Judges has been drawn to the High Court's opinion that much can be done to avoid such a result by more judicious posting of cases and by summoning witnesses in batches when the trial of a case is likely to be protracted. There was a fall, by about 4,600, to 112,053 in the number of cases reported under the Indian Penal Code during the year. On the other hand there was an increase in all kinds of offences against property, particularly those attended with violence which was very marked in almost all districts. The cause is to be found in the general scarcity consequent on the failure of the monsoon and the high prices due to the long continuance of the war, which led to sporadic outbreaks of rioting and theft in numerous localities. The offenders for the most part did not belong to the criminal classes, but were excited by the suspicion that prices were being artificially inflated by profiteers. The victims were generally dealers in grain or cloth. It is gratifying to observe that there was a general decrease in serious crime in South Arcot and Ganjām and a decrease in the number of offences against property in Coimbatore and Malabar. The percentage of conviction in cases tried under the Indian Penal Code fell from 44·33 to 39·02. There was also a fall from 14·84 to 14·45 in the percentage of cases for disposal under the Indian Penal Code which were rejected under section 203 of the Code of Criminal Procedure, as also in the number of persons required to pay compensation under section 250 of the Code. With a fall in institutions there was a drop in the total number of sentences passed during the year, as also in the amount of fines imposed and that of compensation paid to complainants under section 545 of the Code of Criminal Procedure. There was a slight fall from 3,722 to 3,345 in the number of sentences of imprisonment for periods of 15 days and less. There was also a gratifying increase, from 311 to 377, in the number of persons released under section 562 of the Code. It is satisfactory to observe that the inadvisability of committing juvenile offenders to jail was generally appreciated, though the number of young persons admitted to the prisons of the Presidency during the year was slightly larger than in 1917. There was a regrettable fall, by 114, to 239 in the number of cases under the Madras Forest Act disposed of by subdivisional magistrates during the year.

Punishments

PRISONS (1918)

[*Report on the administration of the Jails of the Madras Presidency*, 1918; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

Accommodation

89. The number of central and district jails remained the same as in the previous year, viz., nine and five respectively. The Civil Debtors' Jail at Madras was open throughout the year for the confinement of civil debtors in Madras City. A new sub-jail was opened at Mulki in the South Kanara district and the sub-jail at Vāyālpad in the Chittoor district was closed. The number of sub-jails at the close of the year was thus the same as at its beginning, viz., 318. The accommodation available in all the central and district jails and in the Civil Jail at Madras was generally sufficient, but towards the close of the year some of the jails were overcrowded owing to large admissions and the pressure was relieved by transfers. In a few jails the civil debtors and under-trial prisoners admitted were in excess of the accommodation provided, and

the excess prisoners were confined in wards inside the jail intended for other classes of prisoners.

Prisoners of all classes

90. The year opened with a population of 12,308 prisoners of all classes confined in the jails and sub-jails together, 116,454 were received and 113,513 discharged during the year, leaving 15,249 at its close. The daily average number confined was 13,375·76 as compared with 12,135·78 in the preceding year and is the highest on record since the famine year of 1877.

Under-trial prisoners

The number of under-trial prisoners dealt with, including those (2,299) in confinement at the beginning of the year, was 62,386. The daily average was 3,076·86, or 920·97 more than in the previous year. Of the total under-trial population 37·71 per cent were convicted and sentenced and 61·92 per cent were released. There were 27 escapes and 93 deaths amongst this class of prisoners. There was a satisfactory fall from 32·66 days to 31·52 days, in the average period of detention of prisoners awaiting trial before sessions courts and, from 17·51 days to 12·80 days, in that of prisoners pending trial before magistrates.

Civil prisoners

The number of civil prisoners in confinement at the beginning of the year was 584; 3,380 were received and 3,573 discharged during the year, leaving in custody at its close 391, which approximately represents also the daily average number. Compared with the previous year, the number received, discharged and remaining at the close of the year, as also the daily average population, show a fall.

State prisoners

Five State prisoners remained in confinement in jail at the close of the year as against six at its beginning.

Convicts

91. On the 1st January 1918 the strength of the convict population was 9,193 males and 232 females, or 679 less than in the previous year. The number received by direct committal rose, by 2,965, to 23,180 males and, by 87, to 1,016 females. The total number of convicts received by transfer was also larger than in 1917 by 3,455. Of those discharged during the year, 2,436 were released on appeal, 17,423 on expiry of sentence, 2,880 under the remission rules, 15 by order of Government on account of sickness and 230 by the same authority on other grounds such as service in Mesopotamia; 154 convicts were transported to Port Blair and 12 to the Lunatic Asylum. Four escaped and remained at large, 69 were executed and 262 died. The daily average number was 9,908·79, or 420·40 more than in the previous year. The number left in jail at the close of the year was also larger, viz., 10,801 against 9,425. As usual, the great bulk of the admissions consisted of Hindus who formed 89·45 per cent, Muhammadans (7·69 per cent) and Christians (2·86 per cent) contributing to the remainder.

Juveniles

The number of convicts admitted under the age of 16 years was 107 as compared with 64 in 1917. The number of youthful offenders under 15 years was only 36, though higher than that of the previous year by seven. The number of girls admitted was four as against three in 1917. Of the 32 male juveniles, 22 were transferred to the Reformatory School, Chingleput, and the remaining ten boys and the four girls served their sentences in jail. The jail for adolescents at Tanjore, run somewhat on the Borstal system, continued to work satisfactorily. The usual course of instruction in general elementary education, physical and moral training and teaching of industries was followed. Boys of the agricultural class underwent courses of instruction in agriculture given by a specially appointed graduate of the Agricultural College, Coimbatore, by means of lectures in the class room and practical demonstration in the field. As an experiment a few prisoners who had completed about half their sentences were released conditionally to work under private firms till their original sentences expired. Much importance was attached to the after-care of prisoners released from this institution and probation officers were appointed to look after them and report periodically on their conduct.

Conduct

92. There were nine escapes from central and district jails and six from sub-jails. Eleven of these were recaptured and four remained at large at the end of the year. The number of jail offences dealt with by Superintendents fell, by 151, to 8,262 and 16 offences were dealt with by criminal

courts as compared with 11 in the preceding year. The total number of punishments declined from 8,501 to 8,364 as also the ratio to average strength which fell from 89·59 to 84·41 per cent. There was no change in the number (9) of corporal punishments inflicted. Habituals formed 22·57 per cent of the convict population and received 4,229, or 51·02 per cent, of the total number of punishments and all the nine whippings. The conduct of the prisoners was on the whole satisfactory; the percentage of punishments, viz., 84·41, being the lowest on record for many years past. There was no disturbance or combination against authority in any of the jails except at the Penitentiary where a Pathan military prisoner, who was an overseer in the kitchen, was beaten to death by six convicts for detecting two of them in possession of contraband. The number of convicts released under the remission rules fell, by 60, to 2,880. Special remission for continuous good conduct for one year was awarded to 1,909 convicts. For work done beyond their prescribed task extra remission was earned by 341 convicts, and 25 convicts were granted extra money award amounting to Rs. 82–0–6. Elementary education in reading, writing and arithmetic was imparted in all jails by a special teaching staff. Religious and moral lectures were given from time to time by the jail teachers and also by ladies and gentlemen who offered their services for the purpose. The jail schools were annually inspected by officers of the Educational department whose reports were generally satisfactory and encouraging.

Habituals

Remissions

Education

93. Owing to the prevalence of influenza in an epidemic form, the failure of seasonal rains and abnormal climatic conditions, the health statistics of jails were affected unfavourably. The admissions to hospital increased, by 1,662, to 6,996. The daily average sick was also large, viz., 239·93 as against 179·02. There were 360 deaths during the year as compared with 188 in the previous year and the death-rate rose from 15·49 to 26·91. Influenza alone caused 144 deaths, and deducting this number the death-rate works out to 16·15 per mille. The chief sanitary improvements carried out during the year were the provision of a large double barrelled kite motion pump in the close prison well of the Trichinopoly Central Jail and the completion in the same jail of a new fly proof kitchen on the model of that in the Coimbatore Jail; the supply of an oil engine to work the pump in the big well of the Coimbatore Central Jail; the provision of a new pump to the kitchen well in the Palamcottah District Jail and the construction of a septic tank at Salem. Repairs were carried out to the old pumps at the Cuddalore District Jail which broke down and interfered with the water-supply. New cage latrines were constructed and many latrines were rendered fly proof.

Vital statistics

Sanitation

94. The total expenditure of the year excluding the outlay by the Public Works department on buildings amounted to Rs. 20·07 lakhs, or Rs. 3·90 lakhs more than that of the preceding year. The increase was due to a larger outlay on manufactures and increased expenditure under dietary charges, and generally under almost every other head due to increased population and high prices. There was a slight fall in the cash earnings of the year which amounted to Rs. 2·10 lakhs. The net cost of maintaining prisoners and the average net cost per head increased from Rs. 7·85 lakhs and Rs. 59–7–0 to Rs. 9·08 lakhs and Rs. 67–14–0, respectively. The total expenditure on jail and sub-jail buildings amounted to Rs. 1·35 lakhs as against Rs. 1·26 lakhs in 1917.

Finance

CIVIL JUSTICE (1918)

[*Statistics of the Civil Courts in the Madras Presidency for the year* 1918; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Civil Justice*]

95. The total number of permanent courts which dispensed civil justice during the year remained the same as in 1917. New temporary Subordinate Judges' courts were established at Tellicherry and Guntūr, thus raising the total number of such courts to 22. Two additional

General

District Munsifs' courts ceased to work during the year and one court was established at Bezwada. The total number of such courts thus decreased from 28 to 27. The Additional Sessions Judge at Bellary was again appointed a Subordinate Judge and worked throughout the year. The Second Judge of the Presidency Court of Small Causes was appointed an Additional Judge of the City Civil Court for a period of three months to relieve the congestion in the latter court. The second of the two Indian Civil Service officers selected for civil judicial training completed his training in April. There was a further fall, by 732, to 5,712 in the number of village courts which exercised civil jurisdiction during the year.

Litigation

Number, nature and value of suits

96. The total number of suits instituted in the Presidency fell further, by nearly 28,000, to 488,866, a number which is actually smaller than the figure for 1914. This result, though gratifying, cannot be regarded as a sure indication that the tendency of litigation to increase has been definitely checked, but is probably ascribable to such unusual causes as the continuance of war conditions, the widespread scarcity consequent on the failure of the monsoon and the prevalence of influenza. For the Presidency as a whole one suit was instituted for every 85 persons of the population as against one for every 80 in the previous year. North Malabar was, as usual, the most litigious district in the mufassal and Bellary continued to be the least litigious. The largest number of suits was again instituted in Tanjore and Kurnool contributed the smallest number as in the previous year. Suits instituted for money or movable property formed 88·8 per cent of the total as against 89·03 per cent in 1917. Suits for immovable property, including mortgage suits, further fell from 48,120 to 46,420, while those for specific relief rose, by over 200, to 4,964. The total value of suits instituted in courts other than village and revenue courts and unpaid tribunals rose further, by Rs. 58·72 lakhs, to Rs. 1,043·73 lakhs. Apart from Revenue courts, 34 per cent of the suits instituted were of the value of Rs. 20 and less as against 37 per cent in the previous year, and 60 per cent were between the values of Rs. 20 and Rs. 500 as against 58 per cent in 1917. The number of suits above Rs. 500 in value was 24,500, the highest figure on record. The number of suits triable by village courts which were filed before the higher tribunals fell, by about 7,200, to about 48,100. The percentage of suits in which plaintiffs were successful either wholly or in part rose further from 77·67 to 78·21. In 72·62 per cent of contested cases they were found to possess a well-grounded cause of action. The total number of appeals preferred fell, by 1,554, to 15,513.

Courts of original jurisdiction

Village courts

97. There was a further and considerable falling off, by 19,164, to 107,441 in the total number of suits instituted in village courts. The decrease was largest in South Arcot and was commensurate with the general fall in litigation in that district. There was a further fall in the number of suits disposed of by village munsifs sitting singly, but there was again an increase in the number of suits disposed of by Bench courts which may be taken as a sign of increased public appreciation of this form of tribunal. The total number of suits filed in Revenue courts, other than in the Agency tracts, fell, by nearly 4,000, to about 19,700. The fall was most marked in Madura and Trichinopoly. There was a slight fall in the average duration of contested suits but that for uncontested suits rose further from 94 to 106 days. The percentage of appeals preferred from the decisions of Revenue courts to the appealable decrees passed by them rose from 8·11 to 12·41. The percentage of appeals in which original decrees were confirmed was 45·83 as against 34·83 in 1917. There was no noticeable variation in institutions before Agency courts, but the average duration of contested suits rose from 93 days to 161 days and that of uncontested suits from 63 days to 111 days and the pendency at the end of the year rose from 369 to 607. In District Munsifs' courts other than those for the Agency tracts 107,300 ordinary suits, or 1,400 less than in the previous year, were instituted. The number of small cause suits filed also fell, by about 2,600, to about 200,700. There was thus a decrease of about 4,000

Revenue courts

Agency courts

District Munsifs' courts

in the total of both classes of suits. The average total disposal of each court fell further from 2,025 to 1,975 and the arrears of both classes of suits mounted up, by over 4,000, to 76,900. This is attributed to the influenza epidemic which necessitated the temporary closure of a number of courts while work was hampered and retarded also by the unavoidable absence of parties and witnesses. The average duration of contested ordinary suits rose from 312 days to 315 days and that of uncontested suits from 57 days to 60 days. In Subordinate Judges' courts other than those for the Agency tracts 2,164 ordinary suits, or much the same number as in the previous year, and 20,560 small cause suits, or about 750 more than in 1917, were instituted. There was a fall in the total number of disposals of both ordinary suits and small causes and the arrears of both classes of suits rose from about 5,700 to about 6,900. These results are not satisfactory. The average duration of contested ordinary suits fell from 512 days to 509 days and that of uncontested suits from 74 days to 67 days. The high duration of suits continued to be unsatisfactory and was due mostly to unnecessary adjournments and the failure on the part of the Subordinate Judges to regulate cross-examination. In the District courts other than those for the Agency tracts 486 ordinary suits were instituted as against 422 in 1917; the disposals fell from 392 to 336 and the arrears rose from 421 to 447. In the Special Small Cause courts the disposals, though slightly higher than in the previous year, were not proportionate to the increase in institutions. The pendency therefore increased from 416 suits to 1,925 suits. The average duration of contested suits rose from 93 days to 118 days, which is a very unsatisfactory result. In the Presidency Court of Small Causes and in the City Civil Court a similar state of things obtained during the year, namely, poor disposals in spite of a fall in institutions followed by an increase in the average duration and in pendency. This is to be mainly ascribed to the dislocation of work caused by the prevalence of influenza during the latter part of the year. In the High Court the number of suits instituted or received by transfer was 699 as against 517 in the previous year. The disposals and the arrears amounted to 455 and 587, respectively, as against 475 and 329 in 1917. The increase was due to a considerable rise in institutions consequent on the instability of the market during the year. The average duration of contested suits was 474 days and of uncontested suits 173 days as against 331 and 183 days respectively, in 1917. This was due to the disposal of a number of long pending suits.

Subordinate Judges' courts

District courts

Court of Small Causes

Madras City Civil Court

The High Court

98. The number of regular appeals filed in the Agency tracts fell from 121 to 107. Including the previous year's pendency there were 144 appeals for disposal, of which 119 were disposed of. The average duration rose from 57 days to 78 days and the percentage of confirmation fell from 60·78 to 56·3. The number of appeals filed in District and Subordinate Judges' courts fell, by 1,100, to 12,200. The arrears in the latter rose from 2,700 to 2,900, while in the former they fell from 6,500 to 6,000. In Subordinate Judges' courts the average duration in the case of uncontested appeals rose from 196 days to 437 days and in the case of contested appeals from 280 days to 322 days. In District courts the figures of average duration were considerably more satisfactory though there was a rise in the case of contested appeals. The number of appeals filed in the High Court from original decrees of mufassal courts rose slightly from 431 to 441, while the disposals fell from 532 to 465. The arrears decreased from 624 to 606. The average duration of appeals disposed of fell further from 466 to 418 days. The number of Letters Patent appeals (other than Original Side Appeals) filed was 110 against 193 in 1917, of which 128 were disposed of, leaving a balance of 61 appeals as against 79 in the previous year. The number of appeals received against appellate decrees was 2,173 against 2,546 in 1917, of which 2,400 were disposed of as against 2,519 in the previous year. The arrears decreased from 2,342 to 2,121. The percentage of appeals dismissed was—first appeals from District courts 66·37, from the City Civil Court 76·19 and from Subordinate Judges' courts 67·24; Original Side appeals 54·63, appeals against appellate decisions 81·91

Appellate courts

District and Subordinate Judges' courts

The High Court

Reference and revision

and Letters Patent appeals 78·13. The number of revision petitions filed in the High Court rose, by 61, to 1,381, of which 572, or 217 less than in the previous year, were for the revision of decisions in small cause suits. The number disposed of fell, by 222, to 1,156, and the arrears rose from 1,006 to 1,231, of which 442 were pending for more than six months. The number of cases referred by the lower courts to the High Court was 10, and including the pendency of 1917 there were 18 cases for disposal, of which 14, or double the previous year's number, were disposed of.

Insolvency

Mufussal courts

99. There were no noticeable variations in the number of insolvency petitions presented to mufassal courts during the year or in the number disposed of. The pendency at the end of the year rose from 947 to 1,007. The number of petitions granted fell from 1,661 to 1,638 and the total amount of creditors' claims admitted from Rs. 19·52 lakhs to Rs. 12·74 lakhs. The total amount of assets distributed, however, amounted to Rs. 4·83 lakhs as against Rs. 4·28 lakhs in the previous year. The number of insolvents discharged was only two. In the High Court the number of petitions presented fell from 251 to 230 and the disposals from 266 to 244 and the arrears remained practically stationary. The total amount of claims admitted was Rs. 6·89 lakhs and the amounts paid as dividends to creditors Rs. 1·95 lakhs, the corresponding figures for the previous year being Rs. 11·27 lakhs and Rs. 3·05 lakhs, respectively.

Miscellaneous

Execution

100. The total number of applications for execution received in all the courts in the mufassal taken together, except village courts, fell, by about 15,200, to about 340,600. Satisfaction in full was obtained in 16·31 per cent of the applications disposed of as against 16·34 per cent in the previous year and satisfaction in part in 7·86 per cent as against 7·81 per cent. The number of wholly infructuous applications fell, by about 11,100, to about 258,800. There was a satisfactory fall from 3,532 to 2,771 in the number of debtors imprisoned in execution. One hundred and thirty-two District Munsifs, or one more than in the previous year, inspected the records of nearly 2,800 village courts, or 100 more than in 1917, and 132 District Munsifs' and Subordinate Judges' courts, or 15 more than in 1917, were inspected during the year.

Finance

101. The total receipts of civil and criminal courts fell, slightly, from Rs. 109·70 lakhs to Rs. 109·17 lakhs while the charges rose from Rs. 88·67 lakhs to Rs. 89·52 lakhs.

REGISTRATION (1918) AND COMPANIES (1918–19)

[*G.Os. No.* 994, *Home (Judicial), dated the* 5*th May* 1919, *and No.* 1403, *Home (Judicial), dated the* 19*th June* 1919 ; *Statistics of British India, Vol. IV, Administrative, Judicial, etc., Registration Department of Statistics, India. Joint Stock Companies in British India, etc. Statistical Tables relating to Banks in India*]

Registration Offices

102. The number of district charges increased during the year from 21 to 23, the rise being consequent on the reconstitution as a separate registration district, with effect from the 1st April 1918, of the revenue district of Kurnool, which had been amalgamated with Cuddapah for registration purposes since January 1913, and the division, on the 1st July 1918, of the registration district of North Arcot, comprising the two revenue districts of North Arcot and Chittoor, into two separate districts conterminous with those revenue districts with headquarters at Vellore and Chittoor respectively. Three additional posts of Sub-Registrar were created, viz., a Joint Sub-Registrar for the Registrar's office, Vizagapatam, an additional Joint Sub-Registrar at Coimbatore and a Joint Sub-Registrar at Tiruvannāmalai. The two separate offices at Tenkāsi (Tinnevelly) were amalgamated and out of the sub-district of Pattukkōttai (Tanjore), which was presided over by two joint officers, a new sub-district was constituted with headquarters at Peravurni to which one of the joint officers was transferred. The sub-office at Podili, over which an ex-officio Sub-Registrar had been presiding, was, as a temporary measure,

placed under a special Sub-Registrar for one year from the 1st December 1918. Thus the number of Sub-Registrars rose from 513 to 517, while the number of offices remained the same (490). The unsettled conditions of trade and of the money market continued to prevail during the greater part of the year, but the position became steadier with the cessation of hostilities and the prospect of peace. The high prices of the necessaries of life tended throughout the Presidency to an increase in registrations as the poorer classes were forced to sell or mortgage their property to tide over their difficulties. As a result, registrations rose, by nearly 9,000 or 0·66 per cent, to 1,368,578 and almost reached the level of the pre-war year 1913. Special causes which led to an appreciable rise in the number of transactions in individual districts were the partial resuscitation of trade in groundnut and the more profitable results from the cultivation of cotton. On the other hand the almost universal prevalence of epidemics, notably influenza, and the lack of transport facilities exerted a considerable retarding influence in certain districts. Documents affecting immovable property formed as usual the bulk (95 per cent) of the year's transactions and increased by 0·7 per cent. Mortgages of all values rose by 2 per cent; whilst sales of the value of Rs. 100 and upwards increased by 4·3 per cent and those of lower value dropped, an indication of the growth in the value of immovable property. The rise of 17 per cent in the number of wills registered is ascribed to the prevalence of epidemics and the consequent uncertainty of life. The aggregate value of registered transactions rose from Rs. 45·9 crores to Rs. 48·4 crores; and the average value and the average fee per document also increased from Rs. 340 to Rs. 357 and from Rs. 1-8-1 to Rs. 1-8-9 respectively. Documents registered by or on behalf of co-operative societies increased, by 2,187, to 15,817 and the fees leviable but foregone, by Rs. 3,530, to Rs. 39,646. Nine cases under the Indian Registration Act were pending at the commencement of the year and an equal number was newly instituted. Eleven of these ended in conviction and two in acquittal, leaving five pending. The total income rose from Rs. 24·75 lakhs to Rs. 25·54 lakhs and the expenditure from Rs. 14·17 lakhs to Rs. 15·70 lakhs.

Registrations

Prosecutions

Finance

103. The Indian Companies Restriction Act, 1918 (Act XII of 1918), was passed just before the opening of the year with the object of controlling the withdrawal of capital from the money market. It requires a licence from the Governor-General in Council for the registration of public companies, but it was notified that licences would be granted freely to 'nidhis' and to other companies in cases in which the capital to be raised did not exceed one lakh of rupees during the currency of the Act. The number of licences so issued was 202—45 permitting new registration, three authorizing the issue of debentures and 154 sanctioning the increase of authorized, subscribed or paid-up capital. The registration of four companies without licences, immediately on the introduction of the Act, was treated as invalid and the year opened with 394 working companies —351 limited by shares, 42 limited by guarantee and one an unlimited private company. Thirty-eight companies—35 limited by shares and three by guarantee—were registered and 16—15 limited by shares and one by guarantee—ceased to exist. There were thus 416 companies at the close of the year—371 limited by shares, 44 by guarantee and one unlimited private company—of which 48 were private companies. As a result of the restrictions imposed by the legislature on the floatations of public companies, a large proportion of the new concerns consisted of private companies and the capital of no public company registered in the year exceeded a lakh of rupees. The largest floatation was the Madras Tanning and Trading Company, Limited, a private company with an authorized capital of five lakhs. With the exception of three, all the new companies were Indian consisting mainly of 'nidhis' and small trading concerns. Five 'not for profit' associations—mostly for the promotion of education —obtained licences under section 26 of the Indian Companies Act, 1913. The companies wound up comprised 'nidhis,' rice mills and trading concerns and were all Indian with a single exception. The aggregate

Registered companies

authorized and paid-up capital of all companies rose from Rs. 11·32 crores and Rs. 6·37 crores to Rs. 11·64 crores and Rs. 6·63 crores, respectively, and the average paid-up capital was Rs. 1·78 lakhs against Rs. 1·79 lakhs. The number of companies incorporated outside British India but having a place of business in this Presidency rose, by two, to 137. There were 15 cases of non-compliance with the provisions of the Act, of which 11 ended in conviction. The receipts and expenditure fell from Rs. 12,625 and Rs. 12,045, respectively, to Rs. 10,968 and Rs. 11,786. The number of certificated auditors at the close of the year was 48, viz., three permanent unrestricted, nine permanent restricted, and 36 temporary restricted. The Institute of Commerce was opened in Madras with the object of affording facilities for the training of persons in the audit of the accounts of companies and of those desirous of engaging in commercial undertakings. In the management of the Institute the Director of Public Instruction is assisted by an advisory council of which the Registrar of Joint Stock Companies is a member ex officio. The Registrar of Joint Stock Companies was appointed a member of the committee instituted for the selection, with reference to the rules under the Income-tax Act, 1918, of certified auditors under the Indian Companies Act who wish to be approved for income-tax purposes. In September 1918 the High Court published rules under section 246 of the Indian Companies Act regarding the reduction of capital and the winding up of companies. One Provident Insurance Society was registered during the year, the number of such societies at the end of it being 13. All the societies were inspected by the Registrar. Six life assurance companies were working, one of which was also registered under the Indian Companies Act. Consequent on the bifurcation of each of the registration districts of Chittoor-North Arcot and Cuddapah-Kurnool, the number of Assistant Registrars of Joint Stock Companies increased from 23 to 25.

Provident Insurance Societies Act, 1912

Notaries Public (1918-19)

104. The number of notarial stations remained the same (141) as in the previous year, but that of registering officers exercising the functions of Notaries Public increased from 182 to 185 in consequence of the constitution of two new registration districts (Kurnool and North Arcot), the Registrars of which were appointed Notaries Public. As in the previous year the operations were confined to seventeen stations. Bills of Exchange increased from 51 to 71. This increase occurred mainly at Tuticorin (6), Tanjore (13), Trichinopoly (7), and Negapatam (7). As in the previous year the unsettled condition of trade rendered it difficult for merchants to meet demands in all cases. Of 13 bills dealt with in Tuticorin five were noted for non-payment and eight for non-acceptance by the drawee on account of the difference in the quality of goods supplied and in the prices quoted. The transactions in Tanjore included a bill for Rs. 25,800 presented from the Hongkong and Shanghai Banking Corporation. Promissory notes decreased from 28 to 11. The decrease was marked in Tuticorin (7), Cochin (5), and Cannanore (3) and was due to the stringency of the money market which restricted considerably loans of money on personal security and the establishment of another bank in Cannanore where money was lent on the security of movable property. In spite of the increase in the number of operations, the aggregate value of transactions fell from Rs. 2·18 lakhs to Rs. 1·78 lakhs, but the figures of the previous year included seven promissory notes for Rs. 1·50 lakhs relating to a single individual in Tuticorin. The fees realized amounted to Rs. 378–8–0 against Rs. 284–1–6 and a sum of Rs. 52–14–6 was expended by the Notaries Public as against Rs. 59–7–0 in 1917–18. The balance of Rs. 325–9–6 was remitted into the treasury. No office of a Notary Public was inspected by the District Judge under rule 4 of the Notarial Rules.

CO-OPERATIVE SOCIETIES

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Report on the working of the Co-operative Societies Act for the year 1918-19; Statistics of British India, Vol. II, Financial Statistics, Part I, Co-operative Societies.*]

General

105. The most prominent feature of the year's working was the increase of trade on an agency basis by agricultural credit societies on behalf of their members. Attempts were made to organize the trade by combining the credit societies as shareholders in trading unions with substantial share capital and limited liability. An interesting experiment, full of promise, was inaugurated by two societies organized during the year somewhat similar to these trading unions. They combine both credit societies and individuals in their membership and in addition to joint purchase and sale propose to undertake the co-operative preparation of their members' produce for market. A few small industrial societies were started for special needs, and a beginning was made with co-operation in the Agencies of the Northern Circars by the registration of three societies. Twenty-nine administrative unions were added during the year, bringing the total number of such unions to 103. The total number of societies under the control of local or banking unions for purposes of supervision was 2,826 as against 2,415 in the previous year. As many as 970 societies were registered as against 515 in 1917–18, and the registration of 12 societies was cancelled. Excluding unions there were 3,573 societies at the close of the year, with 244,297 members, as against 2,644 societies at its beginning, with 191,041 members, but the average number of members to a society fell from 72 to 68. The number of Panchamas admitted into agricultural societies increased, by 2,972, to 10,050. The total working capital of all societies increased from Rs. 234·92 lakhs to Rs. 305·21 lakhs, their paid-up share capital from Rs. 26·13 lakhs to Rs. 34·69 lakhs and their reserve funds from Rs. 11·88 lakhs to Rs. 14·65 lakhs. Loans from central banks and other societies to primary societies increased from Rs. 79·81 lakhs to Rs. 100·97 lakhs. The net profits for the year rose slightly from Rs. 3·34 lakhs to Rs. 3·58 lakhs. The total cost of working the Act to Government was Rs. 2·26 lakhs as against Rs. 1·90 lakhs in the previous year and was equivalent to 0·74 per cent of the working capital of the societies as against 0·81 per cent in the previous year. The amount spent by societies for their own supervision was Rs. 0·57 lakh as against Rs. 0·47 lakh in the previous year.

Working of societies

Provincial and District banks

106. Some progress was made in the conversion of the Provincial Bank into a federation. A revised constitution was framed for it at a conference of the representatives of central banks and this was agreed to in principle by the Directors of the Provincial Bank. The details were worked out. Only one society took shares in the bank during the year. As in the previous year there was no large increase in share capital, but there was again a substantial increase in deposits and working capital and the net profits rose from Rs. 0·39 lakh to Rs. 0·64 lakh. Six new central banks were started during the year and they attracted Rs. 0·95 lakh. There are now central banks in all the districts of the Presidency excepting Rāmnād, the Nilgiris and Bellary. The share capital of all the financing banks in the Presidency rose from Rs. 8·31 lakhs to Rs. 11·29 lakhs and their reserve funds from Rs. 2·01 lakhs to Rs. 3·07 lakhs. Their owned capital therefore amounted to Rs. 14·36 lakhs which represents nearly 17 per cent of the total amount of the loans and deposits taken by them from outside the movement. The total deposits so taken by financing banks amounted to Rs. 84·49 lakhs as against Rs. 66·04 lakhs in the previous year. In spite of the bad season, the profits of the banks were, generally speaking, normal. There was a slight increase in the percentage of overdues in principal and current interest due to central and provincial banks. The percentages of balances to demand were 14·16 principal, 13·75 arrear interest and 4·59 current interest as against

Agricultural societies

12·27, 16·69 and 4·04. There was an arrear of 15 per cent in the Madras Central Urban Bank, Limited. On the 30th June 1919 the total number of agricultural credit societies was 3,048, or 777 more than in the previous year, of which eight continued to work on a limited liability basis. The composition of these societies suggests that the land-owning classes have been on the whole extremely reluctant to admit the poorer men of the village to the benefits of the co-operative movement. The total working capital of these societies rose from Rs. 97·93 lakhs to Rs. 122·95 lakhs and their paid-up share capital from Rs. 7·22 lakhs to Rs. 9·91 lakhs. It is somewhat discouraging that 1,320 societies worked at a *minus* balance, of which no less than 819 were old societies. This was due to the bad state of the season and the other unfavourable conditions of the year. The local deposits increased from Rs. 9 lakhs to Rs. 10·65 lakhs and the total amount of loans from the financing banks outstanding against these agricultural societies was Rs. 94·56 lakhs as against Rs. 75·47 lakhs in the previous year. A good deal of work other than credit was done by agricultural credit societies and unions. There were 14 new societies registered under this head, of which four are ordinary village stores, five are trading unions and five societies of a special kind. The trading unions are primarily intended to do an agency trade for credit societies who form a large part of the membership. They are based on share capital and include individual members. Sometimes, in addition to trading as agent for their affiliated society members, they keep a store and sell to individual members. An important agricultural society was formed at Tindivanam in the South Arcot district during the year. This is also a combination of society and individual members and its primary object is to prepare the raw produce of its members for market. The South Kanara Garden Planters' Society is another interesting venture. It covers an area rather larger than a taluk and embraces as its members the growers of areca and other garden produce. Its main business is the joint sale of these products through the society's agent in Mangalore. There was a slight extension of the system of the joint purchase and ownership of implements for leasing to members and a considerable development of the joint purchase of requirements and the joint sale of produce by ordinary credit societies which was considerably stimulated by the scarcity of food in many districts. Some progress was also made by credit societies in the direction of the joint sale of the agricultural produce of their members. There were 361 non-agricultural credit societies at the end of the year as against 283 at its beginning. The number of limited liability societies increased from 206 to 266 and that of unlimited liability societies from 77 to 95. Their total working capital increased from Rs. 31·35 lakhs to Rs. 40·27 lakhs, but the profits fell from Rs. 1·19 lakhs to Rs. 1·17 lakhs. The percentages of balance to demand under principal, overdue interest and current interest were 11·11, 39·67 and 11·02 as against 9·24, 34·39 and 10·60 in the previous year. The share capital of these societies rose from Rs. 9·08 lakhs to Rs. 11·03 lakhs and their deposits amounted to Rs. 23·12 lakhs as against Rs. 17·72 lakhs in the previous year. Their borrowings from central and other societies rose from Rs. 3·11 lakhs to Rs. 4·19 lakhs. At the end of the year there were 89 societies for purchase and sale, or 51 more than in 1917–18. Sixteen of the new societies were trading unions and 28 were new store societies which included five weavers' societies. The most important of the latter was the weavers' society at Ichchāpuram to which yarn was supplied by the Government at a cheap rate with the idea of relieving the distress among the weavers. The total sales of these store societies to members amounted to Rs. 18·12 lakhs, of which nearly one-half represented the business done by the Triplicane Stores. As in the previous year several societies were at work for the exclusive benefit of particular classes, of which mention may be made of a large society started for the Sourashtras of Madura for distributing British alizarine dyes, a cobblers' society at Tiruvannāmalai and a society started at Sydapuram in the Nellore district

Non-agricultural societies

for the workmen engaged in making vessels out of the soapstone quarries there. One new building society was organized during the year at Bezwada and the Salt Loaders' Society at Madras continued to work well. At the end of the year there were 118 societies exclusively composed of Panchamas as against 43 in the previous year.

Miscellaneous

107. The number of local unions rose from 74 to 103 with 2,568 societies affiliated to them as against 1,725 societies in the previous year. There were 410 agricultural societies not affiliated to any union. A district federation of the unions in the North Arcot district was registered at the end of the year. Its duties are to co-ordinate the work of the various unions and to give them special assistance in supervision. There was a slight increase in the number of suits filed, but, considering the great increase in the transactions of the year, litigation cannot be said to be unduly increasing. The arbitration rules were freely taken advantage of; there was a large decrease in the number of disputes filed before Assistant Registrars under these rules. The number of Assistant Registrars' charges was increased further from eight to nine. In February 1919 there was a conference of representatives of central banks at which the question of the best means of forming the Provincial Bank into a genuine federation of central banks was discussed. The annual Provincial Conference was held in Madras in April 1919, when some interesting resolutions came under discussion. A large number of district and union conferences took place during the year. A conference was also held at Bezwada to which all the societies in the Telugu country were invited. The attitude of the general public continued to be most cordial and co-operators may congratulate themselves on a successful year in spite of a most unsatisfactory season.

LOCAL BOARD ADMINISTRATION—(1918–19)

[*Statistics of British India, Vol. IV, Local Self-Government—District and Sub-District Boards*]

General

Constitution and strength of boards

District boards

Taluk boards

Union panchayats

108. The number of district boards in the Presidency continued to be 25. The maximum strength of twelve of these was increased and as a result there was an addition of 51 members to their total strength. At the end of the year 771 members, or two more than in 1917–18, took part in the deliberations of the district boards in the Presidency. Of these 126 were ex-officio, 260 nominated by Government, and the remaining 385 elected by taluk boards, the corresponding figures for the previous year being, respectively, 125, 278 and 366. Two hundred and ninety-one meetings, or one less than in 1917–18, were held by district boards. A new taluk board was constituted on the redistribution of divisions and taluks in the Salem district consequent on the transfer of the Nāmakkal taluk from the Trichinopoly district. The number of taluk boards accordingly rose from 96 to 97. The number of boards which elected their own presidents increased from 4 to 10 and 44 others, or 11 more than in the previous year, had non-official presidents. The sanctioned strength of taluk boards slightly increased, by 13, to 1,747, but the actual number of members at the end of the year declined, by 104, to 1,565, of whom 331 were officials and 1,234 non-officials as against 370 and 1,299, respectively, in the previous year. Of the 268 seats open to election in the year, 254 were actually so filled, and in the case of 104 elections, which were contested, 45·5 per cent of the registered voters came to the poll as against 51·6 per cent in 1917–18. The number of seats which had to be filled up by presidents of district boards by nomination, because no candidates were proposed, declined from 31 to 22. One thousand two hundred and ninety-eight meetings, or 56 more than in the previous year, were held by taluk boards. The number of union panchayats which assisted in the administration of local affairs in important villages rose, by 71, to 535

and there was no change in their functions. The number of panchayatdars rose, by 207, to 4,538, of whom 952 were village headmen, 3,193 were nominated and 393 elected.

Finance Receipts

109. The land-cess was levied at As. 2 on every rupee of the land receipts assessment on the Nilgiris, at rates varying from As. 2 to As. 1-6 in Malabar, at As. 1-6 in South Kanara and at Anna 1 in the remaining districts. In addition to that cess a special cess of 3 pies in the rupee on the annual rent value of all occupied lands was levied in sixteen districts for the construction of railways. Tolls upon carriages, carts and animals were collected in all districts. House-tax was levied in all unions excepting 15 which were constituted late in the year; the maximum rates were in force in 446 cases, three-fourths in 60, and half rates in the remaining 14. Excluding the transactions under debt heads, the year opened with a balance of Rs. 208·91 lakhs, or Rs. 23·07 lakhs more than in 1917-18. The receipts rose, by Rs. 37·72 lakhs, to Rs. 239·42 lakhs; including the receipts from the special railway cess, the revenue from rates and taxes rose, by Rs. 3·56 lakhs, to Rs. 108·04 lakhs. Increases occurred under land-cess, house-tax and tolls. There was a rise under land-cess in 11 districts and a fall in 14 districts. The income from tolls showed an improvement in 22 districts, noticeable increases occurring in Madura, Coimbatore, Vizagapatam and Chingleput. The grants received from Provincial Funds amounted to Rs. 87·15 lakhs, of which Rs. 17·28 lakhs were contributed in aid of the general resources of local boards, Rs. 28·99 lakhs were granted for education, Rs. 26·97 lakhs for roads and bridges, Rs. 0·65 lakh for hospitals and dispensaries, Rs. 1·18 lakhs for medical buildings, Rs. 2·84 lakhs for minor sanitary works, Rs. 0·70 lakh for the improvement of pilgrim centres, Rs. 0·30 lakh for anti-malarial operations and Rs. 0·37 lakh for choultries. The grants for public works were paid as usual to the District Boards of the Nilgiris (Rs. 1·08 lakhs) and Koraput (Rs. 0·24 lakh) in consideration of the smallness of their revenues. The contributions to the general resources of local boards included lump assignments intended to enable them to equip and maintain their own elementary schools adequately. The grants towards hospitals and dispensaries were intended to meet the provincial share of the pay and allowances of medical subordinates employed by local boards and half the cost of the maintenance and equipment of hospitals and dispensaries opened after 1915, and the grants for choultries consisted mainly of lump payments made in lieu of the income from lands originally endowed therefor by their founders but subsequently resumed by Government.

Expenditure

110. Excluding the charges relating to debt heads and contributions from one district board to another and an expenditure of Rs. 1·52 lakhs, which, though debited to service heads, was met from loans that were credited to debt heads, and adding repayments of loans amounting to Rs. 8·28 lakhs, the total expenditure of local boards rose, by Rs. 24·69 lakhs, to Rs. 203·32 lakhs, and the year closed with a balance of Rs. 245·01 lakhs. The outlay on public works rose, by Rs. 11·95 lakhs, to Rs. 91·44 lakhs; Rs. 26·08 lakhs were spent on the construction of roads, bridges, school-houses, dispensaries, markets and other miscellaneous public improvements and the remainder on repairs to existing works. The length of the new roads constructed was 231 miles, or 85 miles more than in the previous year; the expenditure on this account rose, by over Rs. 0·10 lakh, to Rs. 2·82 lakhs. A length of 13,690 miles of roads was repaired as against 13,833 miles in the previous year, and the outlay thereon increased from Rs. 37·38 lakhs to Rs. 48·51 lakhs. At the close of the year local boards maintained 38 sessional schools for the training of teachers, one Sanskrit college, 123 secondary schools and 7,389 elementary schools. In the sessional schools 935 students received instruction and the attendance at all schools rose, by 8,879 boys and 7,559 girls, to 339,424 boys and 90,108 girls. The total expenditure of local boards on education was Rs. 37·33 lakhs as against Rs. 31·22 lakhs in the previous year, towards which fees contributed Rs. 5·02 lakhs and Provincial funds Rs. 21·11 lakhs. The net local fund outlay was thus Rs. 11·20 lakhs, or

Public works

Education

13·2 per cent of the total ordinary income of local boards as against 12·3 per cent in the previous year. The number of hospitals maintained by local boards decreased, by six, to 116, while the number of dispensaries rose, by 18, to 298. The cost of maintenance increased, by Rs. 1·26 lakhs, to Rs. 10·83 lakhs, but the number of patients treated in them fell, further, by 1,655 to 4,470,557. The number of vaccinators including probationers employed by district boards was 496, or 218 less than in the previous year. The average cost of each successful operation rose from As. 4-2 to As. 6-2. The expenditure on sanitation increased, by Rs. 0·40 lakh, to Rs. 11·35 lakhs ; special attention was paid to rural water-supply as in the previous year.

Medical institutions

Vaccination

Sanitation

111. The District Boards of Coimbatore, Tanjore, Guntūr, Kistna and Salem possess open railways. The balance in Government securities in favour of the railway fund of the Tanjore District Board at the beginning of the year was the same as in the previous year, viz., Rs. 28·56 lakhs; there was, besides, a balance of Rs. 0·15 lakh in cash as against Rs. 0·90 lakh in the previous year. The gross traffic earnings decreased, by Rs. 0·57 lakh, to Rs. 8·84 lakhs and the working expenses also fell, by Rs. 0·05 lakh, to Rs. 4·63 lakhs. The district board repaid Rs. 0·71 lakh to Provincial funds towards the recoupment of the Government share in the railway, which is treated as a loan, paid Rs. 0·23 lakh to debenture holders as interest and Rs. 0·56 lakh to the sinking fund towards the liquidation of the debenture loan. The profit derived from the working of the railway was Rs. 4·21 lakhs or 7·75 per cent of the capital outlay as against 8·7 per cent in the previous year, and at the end of the year the balance in favour of the fund after taking into account all charges and receipts was Rs. 30·73 lakhs in Government securities and Rs. 1·39 lakhs in cash. In Kistna the opening balance of the railway cess fund was Rs. 21·50 lakhs in Government securities and Rs. 1·82 lakhs in cash ; the gross earnings of the railway increased, by Rs. 0·09 lakh, to Rs. 3·80 lakhs and working expenses slightly increased, by Rs. 0·03 lakh, to Rs. 1·71 lakhs. The district board repaid a sum of Rs. 1·35 lakhs to Provincial funds towards the Government loan taken for the construction of the line. The profit on the working of the railway was Rs. 2·09 lakhs or 9·3 per cent of the capital outlay as against 9·1 per cent in the previous year, and the closing balance in favour of the fund was Rs. 23 lakhs in Government securities and Rs. 1·23 lakhs in cash. The opening balance of the railway-cess fund in Coimbatore was a little over Rs. 6 lakhs in Government securities with a cash deficit of Rs. 0·06 lakh. The gross earnings of the railway were Rs. 1·93 lakhs and the working expenses Rs. 0·91 lakh. The district board paid Rs. 1·44 lakhs towards the capital and interest on the loan borrowed from the public and from the Bank of Madras. The profit on the working of the railway was Rs. 1·02 lakhs or 8·9 per cent of the capital outlay as against 8·3 per cent in the previous year, and at the end of the year the balance in favour of the fund was a little over Rs. 6 lakhs in Government securities and Rs. 0·43 lakh in cash. The net earnings of the railway in Guntūr amounted to Rs. 0·51 lakh or 3·4 per cent on the capital outlay as against 3·7 per cent in the previous year. The net earnings of the railway in Salem, which commenced working during the previous year, amounted to Rs. 0·12 lakh or 2·6 per cent of the capital outlay.

Railways

MUNICIPAL ADMINISTRATION—MUFASSAL (1918-19)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

112. The total number of municipal councils remained at 72. The number of councillors was raised from 1,183 to 1,195. The actual number at the end of the year was 1,051 of whom 93 were ex-officio, 372 nominated by the Government and the remaining 586 elected by the rate-payers. The system of appointing councillors by election was in force in

General

67 municipalities. The proportion of Indian to European and Eurasian members increased slightly and 32 councils consisted entirely of Indian members as against 21 in the previous year. The councils held 1,800 meetings, or 33 more than in the previous year. One hundred meetings were adjourned for want of a quorum. The average attendance of councillors at each meeting was 57·9 per cent of the total strength as against 57·5 in 1917–18.

Finance

Receipts

113. As regards the financial position, the opening balance was Rs. 34·02 lakhs as against Rs. 33·98 lakhs in 1917–18. Current receipts increased by Rs. 2·87 lakhs, the total being Rs. 94·63 lakhs. Increases occurred mainly under "rates and taxes" and "revenue derived from municipal property and powers apart from taxation." There were increases in the income derived from the following taxes: buildings and lands, from Rs. 17·62 lakhs to Rs. 18·66 lakhs; water and drainage tax, Rs. 8·78 lakhs to Rs. 8·94 lakhs; tax on arts and professions, Rs. 3·04 lakhs to Rs. 3·33 lakhs; tolls, Rs. 8·30 lakhs to Rs. 9·35 lakhs; educational institutions, Rs. 3·20 lakhs to Rs. 3·37 lakhs. The average incidence of taxation per head of the population rose from Rs. 1–13–6 to Rs. 1–15–0. It was as usual relatively high, and higher than in the previous year, in the hill municipalities where it ranged from Rs. 10–3–7 to Rs. 5–14–0; in the plains it ranged from Rs. 4–0–8 to As. 15. There was a decrease of Rs. 1·60 lakhs in the grants and contributions paid by Government. The total grants amounted to Rs 13·48 lakhs and were utilized for general purposes (Rs. 5·93 lakhs), education (Rs. 6·50 lakhs) and medical relief (Rs. 1·05 lakhs).

Loans

Loans amounting to Rs. 3·14 lakhs were advanced to municipal councils by Government as against Rs. 2·29 lakhs in the previous year. The Madura Municipal Council took loans aggregating Rs. 1·02 lakhs for water and drainage works and for the Madichiyam town extension scheme. The Municipal Council of Masulipatam borrowed Rs. 1·19 lakhs for the water-supply scheme.

Expenditure

114. The expenditure rose, by about Rs. 4·90 lakhs, to Rs. 93·60 lakhs. Expenditure on public works amounted to Rs. 28·87 lakhs, or about 31 per cent of the total charges, of which Rs. 8·38 lakhs were spent on communications.

Public works

The Public Works department had under execution water-works in six municipal towns as also improvements and extensions to the existing water-works in six other municipalities and drainage schemes for two towns. One water-supply scheme and four schemes of improvements to existing water-works were sanctioned for execution. Nineteen water-supply schemes, four schemes for improving the existing works, twenty drainage schemes and one scheme of improvements to existing drainage works were under consideration.

Medical

The Government took over the management of the hospitals from municipalities in fourteen district headquarter stations. The hospitals in Tiruppūr and Udamalpet were taken over by the municipal councils. The arrangements for medical relief to the public in the other municipalities continued to be the same as in the previous year. The number of in-patients treated fell, by 12,217, to 37,846. There was also a decrease in the number of out-patients, by 481,212, to 2,067,628. The cost of maintenance fell, by Rs. 0·50 lakh, to Rs. 7·36 lakhs.

Education

There were 815 educational institutions maintained by municipal councils, or 161 more than in the previous year. The increase was four in the case of secondary and 157 in the case of elementary schools. On the other hand the number of elementary schools which the councils aided with teaching grants fell from 296 to 197. The net educational charges amounted to 8·4 per cent of the income from general taxation.

Sanitation

The expenditure on conservancy was Rs. 14·80 lakhs and that on lighting Rs. 3·82 lakhs as against Rs. 13·11 lakhs and Rs. 3·51 lakhs, respectively, in the previous year. The closing balance of the year was Rs. 35·05 lakhs.

Debt

115. The public debt outstanding against municipalities rose from Rs. 30·90 to Rs. 31·84 lakhs. Sinking funds amounted to Rs. 1·23 lakhs.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS (1918-19)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

Finance

116. Including the opening balance the total receipts of the Corporation amounted to Rs. 55·62 lakhs as against Rs. 49·25 lakhs in the previous year and the expenditure to Rs. 44·73 lakhs as against Rs. 39·32 lakhs. The income from municipal rates and taxes was Rs. 24·96 lakhs, or Rs. 1·39 lakhs more than in the previous year. This increase was chiefly due to cursory as well as general revisions of assessment. The incidence of taxation per head of the population was Rs. 4–12–11 as against Rs. 4–8–9 in 1917–18. The revenue derived from municipal property and powers apart from taxation was Rs. 5·53 lakhs, or Rs. 0·53 lakh less than in the previous year. The grants and contributions from Government amounted to Rs. 1·60 lakhs as against Rs. 2·90 lakhs in 1917–18 and were made up of the usual annual contribution of Rs. 0·40 lakh and a special grant of Rs. 1·20 lakhs for sanitary works. Miscellaneous receipts rose from Rs. 2·26 lakhs to Rs. 3·86 lakhs. This increase was due to the payments made by the Fire Insurance Companies on account of the damage caused to the Guzli Bazaars by the accidental fire of September 1918, to the reduction from 1st October 1918 of the free allowance of water from 160 to 100 gallons per rupee of the monthly rental valuation of houses and to the enhancement of the rate for water for non-domestic purposes from twelve annas to one rupee per 1,000 gallons. A loan of Rs. 9 lakhs was received from Government for the improvement of water-supply and drainage. The debt at the close of the year was Rs. 108·26 lakhs. A sum of Rs. 0·72 lakh was paid towards the Government instalment loans and Rs. 4·60 lakhs towards interest on all loans. The sinking funds at the end of the year on account of the several loans, excluding the Government instalment loans, amounted to Rs. 27·05 lakhs in Government promissory notes, stock certificates and Madras municipal debentures and Rs. 2,398 in cash.

Works

117. The expenditure on works amounted in all to Rs. 20·20 lakhs, or 45·2 per cent of the total expenditure, as against Rs. 18·48 lakhs in the previous year. Of this sum Rs. 6·74 lakhs, or 15·1 per cent, was spent on new works, Rs. 11·85 lakhs, or 26·5 per cent, on repairs, Rs. 1·39 lakhs, or 3·1 per cent, on establishment and Rs. 0·22 lakh, or 0·5 per cent, on tools and plant. A sum of Rs. 0·13 lakh was spent on new works, such as the acquisition of lands and buildings for widening roads, rounding off corners and the construction of foot-paths. The amount spent on repairs was Rs. 3·73 lakhs as against Rs. 3·50 lakhs in 1917–18. During the year 41·61 miles of road were re-formed against 45·21 miles in the previous year. Nearly four miles of unmetalled roads were metalled for the first time and an experimental length of over one and a half furlongs of asphaltic road surface was laid in Georgetown. In addition nearly seven furlongs of roads were re-tarred. Construction of culverts and improvement of bridges were also carried out. The expenditure on new works was Rs. 1·01 lakhs and that on repairs Rs. 0·54 lakh. The Isolation Hospital at Krishnampet was fitted with electric lights and certain other improvements were carried out. The model school in Edapalaiyam was completed and the construction of two more schools was in progress. Land was acquired for the construction of additional dwelling houses for scavengers, for a lorry station and for the construction of two flush-out latrines. Three latrines were constructed and three more were in progress. The pail depot in Rayapuram was completed. Some improvements to the gram depot were carried out. The construction of a dhobikhana in Robinson Park and the extension of the existing dhobikhana in Chetpat were in progress. The amount spent on drainage works was Rs. 5·91 lakhs and on maintenance Rs. 5·39 lakhs. Owing to the difficulty of importing materials only such work as could be done with materials obtainable in India was executed. The principal works under construction were storm-water drainage in South Triplicane,

Communications

Buildings

Drainage

Egmore and Salt Depot; gravitation main in Napier Park and along China Bazaar Road; Purasawakam pumping main and station and anti-malaria drainage channel and sewer-laying in Triplicane and West Georgetown. In Tondiarpet area, 408 house connexions to sewers and 50 cast-iron connexions were made and 412 syphon boxes and 40 platforms were built. Drains in 144 houses were altered and sewers were laid in several streets with house connexions in each street. The expenditure on water-supply works was Rs. 0·44 lakh and that on maintenance Rs. 2·16 lakhs. The quantity of water supplied during the year was 5,391·9 million gallons, which was equivalent to 28 gallons per head per day. The maximum average daily consumption per head in any month was 32 gallons and the minimum 21 gallons. During the year, the waste detection staff examined 18,130 houses and brought to notice over 1,641 defects in the services. Under ordinary works 501 new services were laid by the licensed plumbers and 4,113 were repaired, cleaned, altered or extended. The total number of house-service connexions in the City on 31st March 1919 was 29,827. During the year 4,980 feet of old pipes were cleaned and relaid, 1,967½ feet of new mains were laid and 7 valves, 26 stop-cocks, 20 hydrants and 57 meters were fixed. The quantity of water supplied to the City as measured at the Red Hills was 848,801,754 cubic feet as against 803,180,745 cubic feet in the previous year and 848,983,248 cubic feet in 1916–17.

Water-supply

Education

118. The expenditure on education was Rs. 0·53 lakh as against Rs. 0·41 lakh in the previous year. Three new schools were opened during the year and the total number of schools at the close of the year was 24. There were 3,504 boys and 658 girls on the rolls of these schools on 31st March 1919 as against 2,822 boys and 480 girls in the preceding year. There were 136 teachers in the Corporation schools, or ten more than in 1917–18, and most of them were qualified. Permission was granted to private bodies to conduct free night schools for the poor in 21 of the Corporation school buildings and to the teachers to be on the staff of those schools. Eleven teachers were under training in the Government Training School, Triplicane, and stipends were paid to them.

Sanitation and medical service

119. A sum of Rs. 6·08 lakhs, or 13·59 per cent of the total expenditure, was spent on sanitation and conservancy during the year as against Rs. 5·25 lakhs in 1917–18. The cost of maintenance of the Corporation hospitals and dispensaries amounted to Rs. 0·94 lakh as against Rs. 0·78 lakh in 1917–18. The total number of patients treated in them fell, by 2,899, to 172,378. The usual contribution of Rs. 0·20 lakh was paid to Government on account of hospitals, and contributions amounting to Rs. 0·17 lakh, as against Rs. 0·15 lakh, to other medical institutions. The amount spent on vaccination was Rs. 0·15 lakh, or much the same as in 1917–18, and the total number of cases vaccinated in the city in the calendar year 1918 was 32,694. The percentages of success in primary vaccination and re-vaccination cases were 97·79 and 55·24 respectively, as against 98·27 and 54·49 in 1917. The number of children under one year vaccinated was 16,689. The expenditure on registration of births and deaths rose, by about Rs. 2,000, to Rs. 0·23 lakh. The number of births and deaths registered in 1918 was 19,897 and 31,262 as against 23,296 and 19,917, respectively, in 1917. The birth and death rates were respectively 38·4 and 60·3 per mille as against 44·9 and 38·4 per mille in 1917. The number of attacks and deaths from plague was 42 and 31 respectively. The number of rats caught and destroyed was 159,888, making a total of 2,415,307 since the beginning of the operations in July 1898. As in the previous year, attention was directed towards minimising the mosquito nuisance. Six hundred and thirty-six ponds were cleaned and re-cleaned; 6,788 pits and cess-pools, 134 tanks, 843 ponds, 52 low marshes and 32 wells were petrolized every week in addition to numerous other pools and puddles that were formed soon after the rains in several low-lying tracts and tank beds; 3,454 wells were examined to ascertain whether the fish that had been introduced in them were alive and in 1,478, or 42·7 per cent, the wells were found fishless. Malaria

Hospitals and dispensaries

Vaccination

Births and deaths

Plague

Anti-malarial operations

accounted for 2·8 per cent of the total deaths as against 4·3 per cent in 1917, which gives a death-rate of 1·7 per mille.

120. A sum of Rs. 2·72 lakhs was spent on lighting and the cost of maintenance alone amounted to Rs. 0·76 lakh. Six hundred and eighteen new electric lights were installed. The number of electric lights on 31st March 1919 was 3,030. There were also 3,595 oil lamps and one power lamp. The public parks were maintained at a cost of Rs. 0·44 lakh as against Rs. 0·42 lakh in the previous year. The cost of the maintenance of fire engines was Rs. 0·17 lakh against Rs. 0·21 lakh in 1917–18. These engines were requisitioned for 19 fires as against 10 in the previous year. Miscellaneous

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MILITARY (THE INDIAN DEFENCE FORCE) (1918–19)

121. Including 279 junior cadets attached to the 20th Nilgiri-Malabar Battalion, the total strength of the ten units of the Indian Defence Force in the 9th (Secunderabad) Division on the last day of the year was 7,124 men, or 178 less than in the previous year. In the 1st Madras Guards an armoured battery was in course of formation and the formation of junior cadet platoons at European schools was in progress. In the 20th Nilgiri-Malabar Battalion four companies were formed during the year and junior cadet platoons were sanctioned and formed at Lovedale, Coonoor, Calicut, Cochin and Cannanore. A platoon was also formed and attached to the 38th East Coast Battalion. As in the previous year considerable bodies of the Indian Defence Force units were mobilized continuously for garrison and guard duties; but the outstanding feature of the year was their having been called out in aid of the civil power in connexion with the food riots which broke out in Madras City and in several mufassal stations. In September 1918 detachments of the 1st Madras Guards and the 10th Southern Provinces Mounted Rifles were so called out in Madras City and the response was most satisfactory. Special mobile forces of the 29th South Indian Railway Battalion were assembled on various occasions and sent out on similar duties to several places in the Chingleput, Tanjore and Madura districts. A detachment of the 38th East Coast Battalion was called out in August 1918 to assist in suppressing looting in Vizagapatam town.

MARINE (1918–19)

[*Reports of the Madras Port Trust and the Madras Port Department for 1917–18; Statistics of British India, Vol. IV, Local Self-Government—Port Trusts. Accounts Relating to the Sea-Borne Trade of British India. Annual Statement of the Foreign Sea-Borne Trade and Navigation of British India*]

122. The receipts during the year of the Port Trust on revenue account from all sources were Rs. 19·48 lakhs as against Rs. 16·06 lakhs in 1917–18, an increase of about 21·23 per cent. But a sum of Rs. 5·17 lakhs of this increase is ascribable to the imposition on imports and exports of 50 per cent superdues till 12th May 1918 and of 75 per cent thereafter to the end of the year. If contributions made by revenue to capital, which amounted to Rs. 6 lakhs, be not counted, gross expenditure was Rs. 14·18 lakhs or 72·79 per cent of the gross receipts. Excluding from working expenses the interest on loans, which amounted to Rs. 5·67 lakhs, actual working expenses came to about 43·69 per cent of harbour earnings against 43 per cent in 1917–18. The harbour dues alone excluding charges for specific purposes, such as cranage and storage, came to Rs. 12·32 lakhs. Recently in the revision of the Municipal Act, which was before the Legislative Council in the latter part of the year, powers were taken to tax the Port Trust which had since its creation, under a special clause, Madras Port Trust Finance

enjoyed complete immunity from municipal taxation. The Port Trust did not oppose the principle, but urged that an upper limit of taxation should be fixed and that this limit should be a percentage of the annual collections. After considerable discussion in Council this upper limit was fixed at 4 per cent, which is approximately the same as in Calcutta and Rangoon and rather higher than in Bombay and Karachi. To meet this extra cost, the Trust, instead of imposing the municipal dues as a separate charge on the goods it handles, proposes to raise its dues slightly.

Works

123. The west quay of the Madras Harbour, 3,000 feet long, was completed at a cost of about Rs. 30 lakhs. To facilitate the quick despatch of cargo between the quay and transit sheds III and IV situated opposite the southern half of the quay, a metre gauge trolly track was laid during the year on the quay top, with turntables at intervals, connecting with tracts inside these sheds. For better control of quay traffic, the open spaces between transit sheds, giving access to the quay, were gated and walled. Berths III and IV of the quay were brought into use during the year. The reconstruction of the wrecked breakwater went forward steadily during the year and a length of 62 feet of slice work in the shape of ten permanent slices was completed. This short length for the year is due to the fact that temporary slice work had to be laid to carry the Titan crane ahead of the permanent work in order to pick up the blocks and debris at the site of the semi-permanent head. The total length of slice work completed from the commencement of the operation is 170 feet, comprising 28 slices equivalent to 258,604 cubic feet of concrete. The number of old blocks removed from the site of the restoration work during the year is 115 of 44,538 cubic feet, the total removed from the commencement being 576 aggregating 229,610 cubic feet. During the year 402 blocks, 155,439 cubic feet in volume, were manufactured, the total manufactured from the commencement being 1,560 blocks, 618,276 cubic feet in volume. The work of dredging the 10 feet hole for the foundation of the semi-permanent head was commenced by the suction dredger "Madras" on 20th July 1918 and finished on 10th October 1918, the dredger having worked 62 days and dredged 11,150 tons of 20 cubic feet, giving an average of 180 tons per working day. This slow work was due to the fact that the dredger had to dredge an area overlaid with 10 feet of rubble stone and had to stop frequently to clear the stones that kept choking her pipes. All the temporary slices were removed by the end of December 1918 and the eight permanent slices between the head and the finished slice work with their deeper foundations were completed by the end of March 1919. The setting of blocks for the semi-permanent head was commenced about the beginning of March.

Trade

124. The total tonnage which passed through the port during the year amounted to 609,480 tons, or a fall of 21,494 tons, of which the imports showed an increase of 71,076 tons, due mainly to rice and food grains, and exports a decrease of 92,570 tons, due to smaller shipment of groundnuts. The differences in imports as compared with the previous years were very marked: 12 horses were landed against 4,505 in the previous year and in cement only 173 tons were received against 12,145 tons in the previous year. Against these decreases may be set the increase in the grain traffic from 62,000 tons to 170,000 tons and in the quantity of sugar imported which increased from about 30,000 tons to 41,000 tons. There were increases in exports under the heads of tanned hides, manure, the export of which rose from 896 tons to 2,757 tons and of oil-cake, of which 16,845 tons were shipped against 10,827 tons in the previous year. Under all other heads, there were decreases, notably in salt, of which the exports have ceased entirely. On account of restrictions placed on the shipment of groundnuts to Marseilles and for want of freight to Calcutta and Singapore, the shipment fell from 100,710 tons to 16,218 tons. The value of the private trade in foreign merchandise from foreign ports amounted to Rs. 938 lakhs as against Rs. 982 lakhs in the

previous year. The imports from America decreased in value from Rs. 73 lakhs to Rs. 69 lakhs, while imports from Japan increased in value from Rs. 37 lakhs to Rs. 48 lakhs. In Indian merchandise from Indian ports the trade rose from Rs. 203 lakhs to Rs. 392 lakhs, showing an increase of about 93 per cent. There was a considerable increase in the value of trade of Indian merchandise to foreign ports amounting to Rs. 1,123 lakhs as against Rs. 384 lakhs in the previous year. The value of Indian merchandise to Indian ports was Rs. 110 lakhs as against Rs. 154 lakhs in the previous year, showing a decrease of Rs. 44 lakhs.

Minor ports Finance

125. The trade of the minor ports showed some slight improvement over that of the previous year, the restrictions on imports and exports having been relaxed to some extent. The receipts of Port, Marine and Coast Light Funds amounted to Rs. 7·77 lakhs and the expenditure to Rs. 7·55 lakhs. The closing balance consisted of Rs. 4·43 lakhs in cash and Rs. 13·60 lakhs in Government securities. The port dues realized amounted to Rs. 1·27 lakhs as against Rs. 1·24 lakhs in the preceding year and the coast light dues to Rs. 0·78 lakh as against Rs. 0·71 lakh. The aggregate value of the sea-borne trade on private account at the out-ports was Rs. 28·02 crores as against Rs. 24·79 crores in the previous year. The port of Tuticorin continued to have the largest trade, both in exports and imports. The number and tonnage of vessels that entered the out-ports during the year were respectively 20,986 and 2,147,621 tons as against 19,769 and 2,097,074 tons in 1917–18. The total number of passengers that arrived and sailed at the various out-ports further decreased from 349,031 to 291,824. As usual the largest traffic was carried on at Dhanushkodi. A sum of Rs. 1·88 lakhs was spent on public works during the year. The report by Messrs. Wolfe Barry Lyster and Partners, London, on the improvement and development of the Cochin Harbour was received during the year and their proposals were under consideration. Arrangements for obtaining the opinion of a harbour expert were completed in connexion with the scheme for the improvement of certain ports in the Presidency.

General

126. During the year further encouragement was given to the construction of wooden tonnage and ship builders were afforded facilities for the purpose. As a result the industry expanded considerably. A proposal to open a school of navigation for the training of Indian seamen was under consideration. Dredging operations were conducted as in the previous year at the ports of Cocanada, Cuddalore and Negapatam, by three dredgers, and over 105,000 tons of silt were removed. Thirty-three shipping casualties occurred during the year as against 19 in 1917–18, of which two were accidents by fire. Loss of life in them amounted to 19 all told. Coast lights were exhibited throughout the year without interruption in spite of a great deal of sickness amongst the light-keepers and all the port lights were exhibited likewise. In December 1918 an acetylene flashing light was installed at the port of Gopalpur. It lights itself at night and extinguishes itself in the morning automatically and requires no light-keepers to look after it. It has given every satisfaction since its installation. The working of the Port rules and regulations were satisfactory and the boat supply at the several ports was up to requirements.

MORTALITY FROM WILD ANIMALS AND SNAKES (1918)

[*Report on the measures adopted for the destruction of wild animals and snakes during the year* 1918; *Statistics of British India, Vol. III, Public Health, Deaths from and destruction of wild animals*]

Mortality Wild animals

127. The number of persons killed by wild animals was 560 and by snakes 1,275 as against 531 and 1,464, respectively, in the previous year. The mortality from wild animals was, as usual, highest in Ganjām and Vizagapatam and, as in previous years, was caused mostly by tigers.

Snakes

More than 100 deaths from snake-bite occurred in each of the districts of Tanjore, Salem and Malabar. Vizagapatam, Kistna and Trichinopoly also returned high numbers.

Rewards

128. A total sum of Rs. 16,799 was disbursed in rewards for the destruction of wild animals.

MISCELLANEOUS (1918)

[*Reports on the working of the Indian Arms and Explosives Acts; Return of sulphur licences in force during the year* 1918]

Arms, explosives and sulphur

129. The number of licences for arms stood at 48,133, or an increase of 143 over that of the previous year. Licences to carry arms for sport, protection and display numbered 33,017, a decrease of 1,247, which occurred almost wholly in the Malabar district. The total number of licences for the destruction of wild animals doing injury to crops or cattle was 13,975 as against 12,367 in 1917. Here also Malabar accounted for the increase, the number in that district rising by 1,118. A steady increase has been noticeable in recent years in the number of licences for breech-loading guns which rose during 1918 by over 1,500. There was again an increase, by 52, in the number of revolvers licensed and this occurred in about 14 districts. In most other districts there was a decrease. The total number of licences under the Explosives Act rose from 9,683 to 11,233. The increase was chiefly due to the fact that there was a large increase in blasting operations in the Coimbatore district owing to the failure of the monsoon during the year and the consequent scarcity of water in wells. The number of prosecutions under the Arms and Explosives Acts rose, by 20, to 476, and the percentage of conviction was slightly higher than in the previous year. The number of sulphur licences granted slightly decreased and the quantity for which licences were obtained also fell by about 96 tons.

CHAPTER IV

PRODUCTION AND DISTRIBUTION

AGRICULTURE (1918–19)

[*Report on the operations of the Department of Agriculture and the Administration Report of the Civil Veterinary Department, Madras Presidency, for the year* 1918–19 *(G.Os. No.* 1756, *Revenue (Special), dated the* 15*th September* 1919, *and No.* 2189, *Revenue, dated the* 23*rd September* 1919*); Agricultural Statistics of India, Vol. I, British India*]

General

130. The war was again the dominating factor in the development of the department. For the greater portion of the year there were only four deputy directors of agriculture and four assistant directors for the seven circles of the Presidency. This shortage naturally restricted the activities of the department to a considerable extent. One deputy director was away in Mesopotamia. Two provincial officers were promoted to the Imperial Service and another Indian officer was directly recruited thereto. Influenza interfered seriously with the work of the department and was most virulent at the busiest agricultural season of the year. In spite of these adverse conditions material progress was made in opening up new stations and in developing those already in existence. The Gudiyāttam agricultural station in the North Arcot district was taken over on lease in May and a good deal of work was done in getting the land into order and putting up the necessary accommodation for the staff. The new Cambodia station, which will develop into one of the most important farms, was acquired in January, but not much was done owing to shortage of staff. Four new stations for the planting districts were selected—two for rubber at Mooply and Tenmalai, one for tea at Peermade and one for coffee at Siddapur in Coorg. The approaches of the Chintaladevi Ongole Cattle Farm were completed and plans and estimates for buildings were submitted. The paddy-breeding station at Coimbatore was in course of expansion to cope with the increasing number of strains under trial. The Agricultural College classes worked up to the allotted numbers, but the standard was less satisfactory than in previous years. It is clear that an agricultural career offers little attraction to the youth of the country. Fifty-two students were eventually selected for the course, of whom 44 actually joined. The work of the full course students was interrupted by their deputation to Tanjore to help in a special food production campaign and the examination was consequently postponed from December to April. Twelve students appeared and all passed. In the certificate examination 29 appeared and 21 passed. The Estate Writers' class, which largely owes its success to the personal interest taken by the Government Mycologist, was again held and was very popular and successful. A great deal of interest was taken in agricultural and rural education. Farm schools were opened at Pālūr, Anakāpalle and Coimbatore and various missionary societies were also attacking the problem in their own way; and a committee on agricultural middle schools and the general question of rural education sat during the year.

Agricultural research and experiments

131. The research and experimental work of the department, which forms the basis on which all future progress depends, was carried out in the fields of the Central Farm and of the district experimental stations, 20 in number, and in the laboratories of the sectional officers at the Research Institute, Coimbatore. Work on crops consisted of variety

tests, manurial tests and cultural tests, while, besides these, what may be called routine farming and the records that are kept of it was providing an increasing amount of information about the economics of Indian agriculture. For the first time the department was testing on the various stations some of its own Madras seedlings from the Cane Breeding Station under district conditions.

Sugarcane

Paddy

The importance of the paddy crop led, as usual, to a large amount of investigation into seasons and methods of planting, and methods of irrigation and manuring. The most important problem was the question of manuring this crop. The high prices of food-grains were responsible for an awakening on the part of the farmer of the south to the fact that he is not getting enough out of his lands and much interest has been aroused in the departmental work of recommending manure for paddy. A good deal was done in connexion with the supply of phosphoric acid which very many South Indian soils are in marked need of, and it is fortunate that Madras possesses a considerable store of this material in the mineral phosphate deposits of Trichinopoly. The extraction and crushing of this substance are mechanical problems, while the best method of applying the manure to the crop is largely a chemical one. The nitrogen question is also a very important one for this crop which is peculiar in the way in which it takes up this food. Some light was thrown on the nutrition of the paddy crop, but much still remains to be done in following up the green manure, which experience has shown to be such a valuable means of ameliorating paddy soils.

Cotton

Work on cotton continued on the same lines as in previous years. The departmental strains of cotton have already achieved considerable commercial importance, more particularly in the Tinnevelly area. Some most promising strains were coming on in the Northerns and Westerns tract, one of which was favourably reported on by the Indian Cotton Committee which characterized the work as having been "carried out on thoroughly sound and scientific lines." The value of these improved strains to the country is enormous and amounts to many lakhs annually. The improvement of Cambodia cotton was taken up at last and a new station near the Anamalais, in the south of the Coimbatore district, was acquired for the purpose; but it is not possible to locate the work there permanently since the stem weevil (*Pempheres affinis*) seriously interferes with the work.

Dry grains

Similar work was carried out with some measure of success in other crops, such as ragi and sorghum.

Fodder crops and grasses

Fodder crops were gradually acquiring an increasing value in view of the prevailing high prices of industrial non-fodder producing crops, and the devotion of a portion of the holding to a fodder crop was a far commoner practice than it used to be.

Coconut

Considerable progress was reported on the coconut at the new stations on the West Coast, and the department was only beginning to learn something of the structure, development and needs of this important tree, but the investigations carried on gave indications that much that has been assumed about the coconut rests on wholly false foundations.

Miscellaneous crops

Work on potatoes was in progress on the Nilgiri plateau, but it suffered from rather ill-defined control and proposals were made to bring it under the department's direct supervision. Henbane again proved unsatisfactory. Experiments on rotations were in progress at many stations to solve particular local problems which the fluctuations of the relative prices of different commodities had brought into prominence.

Live-stock

Various schemes were initiated by the Deputy Director of Agriculture, Live-stock, for the improvement of cattle and buffalo breeding. He placed an order for four Ayrshire bulls which on arrival will be stationed, after inoculation, at stud in Madras. A very severe attack of rinderpest swept through the Coimbatore herd of half bred and indigenous animals and was responsible for the death of 55 of them valued at over Rs. 5,000. The dairy was as popular as ever and demonstrated the great opening there is for the creamery trade. It was not possible to do much in the way of research owing to lack of staff though a successful attempt was made to manufacture soft cheeses. An attempt to import Shropshire rams for the purpose of crossing with the indigenous Bellary ewe ended in failure as the former succumbed

to sceptic pneumonia shortly after importation. The White Leghorns exhibited by the Central Farm at the Ootacamund Poultry Show in May won a silver cup and two prizes; a first prize was also won at the Madras Poultry Show.

Scientific research and experiments

132. Much of the experimental work in the field is based on the laboratory work carried out at the Research Institute, Coimbatore, the staff of which needs considerable expansion to cope with the increasing demands. The main lines of the research of the chemical section may be described in two words, 'Phosphates' and 'Malt.' The importance of the first lies in the fact that a crying need for almost all crops in Southern India is phosphoric acid, and the problem was being attacked along bacterial and chemical lines to examine the question of their availability and method of utilization. A good deal of work was done on malt and malting. It developed out of the preparations that were exhibited at the Madras Exhibition in 1917 and promises most interesting results both from the scientific and practical point of view. It has been shown that South Indian grains possess considerable diastatic properties. Routine work was very heavy during the year, the number of samples analysed being 427 as against 213 in the previous year. The soil survey of the Kistna was completed and was under publication and work on the Gōdāvari survey was begun. In view of the development of the work on paddy the Government Economic Botanist practically confined his attention to that crop. The season was a bad one for the Paddy Breeding Station, but the engine and pump again proved invaluable and enabled a fair average crop to be raised instead of the very poor crops seen all round. Work was thus carried on without interruption and led to results the value of which was already becoming clear. Very interesting conclusions were arrived at as to the inheritance of characters in paddy plants and it was found that many characters, in themselves unimportant, are 'linked' with others of economic value. A noteworthy incident of the year was the action taken to destroy *Acanthospermum hispidim*, a weed which has become a serious pest in parts of Africa and which was found for the first time in Madras near Tiruppattūr and Nileshwar. The general increase in crop values and the consequent rise in the standard of farming which that increase has brought about have caused more attention to be paid to the damage which insects do to crops and has kept the entomological staff busy. Organized campaigns were undertaken against certain special pests, such as the 'pollu' beetle on pepper, the paddy 'hispa,' the cotton stem weevil, paddy caterpillars and insects on coconut trees. Work on sericulture continued as before, but without much marked success. The department at last obtained the services of a qualified Sericulturist who is expected to join shortly. A small experiment in the cultivation of lac on zizyphus trees in the Bolampatti forests was undertaken at the request of the Forest department with fair chances of success. The Mycologist was largely occupied with the paddy blast (*Piricularia oryzae*, Br. et Cav.). Careful inspection in the Tanjore Delta, in the locality where it was found last year, failed to find a trace of it. The optimism which this fact might have aroused was damped by its discovery at Coimbatore. It was found in the Central Farm and on the Paddy Breeding Station to be attacking patches or varieties which showed particularly luxuriant growth, and this fact opens up the possibility of its becoming a limiting factor to the increase of paddy which is anticipated as a result of the Government Economic Botanist's selections. A similar fungus was, on investigation, shown to exist on some of the more common grasses and experiments were carried out to see how far this could be held responsible for the disease in paddy. A disease resembling 'Brown Bast' was found to be extensive on rubber, but all attempts to discover a causative organism failed. Very interesting work was also carried on against bleeding disease on palms (*Thelaviopsis ethaceticus*) and against mildew (*Oidium tuckeri*) and bird's eye disease (*Glooesporium ampelophagum*, Pass.) on grapes.

Economic botany

Entomology

Mycology

Aid to the public

Operations against disease

133. The department continued to advise the special staff appointed to deal with the palm disease in the Gōdāvari and Kistna districts under the control of the respective Collectors. Work was also done in spraying areca palms against mahali disease. Some 10,000 trees were sprayed, a still further decline on the figure of the previous year. As before the garden owners paid the actual cost of materials used. The campaign against smut on sorghum in the Ceded districts was largely increased and more thoroughly organized than before, and it is calculated that enough seed of the principal cereals to sow nearly 140,000 acres was treated. Other campaigns were carried out by the Entomological section against various pests. The most serious problem which this section has to tackle in the future is probably the pink boll worm (*Pectinophora gossypiella*) which has very rapidly sprung into notoriety in the cotton crop of the south.

Crops

The department carried out demonstrations on sugar-making both in the two power mills at Chittavadigai and Pallapālaiyam. The very high price of iron, both for pans and mills, was however a serious obstacle to expansion. The work initiated at Cumbum in the previous year was successfully extended and consisted in the practical demonstration of the fact that the proper construction of the furnace, and the consequent better combustion of the fuel used, makes it possible to do without the necessity of purchasing any fuel, the megass and trash from the cane itself being sufficient. The trial of a number of different varieties of canes formed part of the programme of work at many of the stations. The distribution of cotton seed assumed very large dimensions and it is estimated that 185,000 lb. of Company seed was obtained and sold to the public. It has been suggested that this should be sold to the public cheap, but the experience of the department has been that it is much better to charge more than the market rate for it in order to ensure that it is not wasted and that, if it proves satisfactory, the grower does not come back for more next year. Company seed was so universal in the Tinnevelly tract that it practically ceased to command any premium. This will bring the seed unions, who grow pure seed for the department, face to face with the serious problem of making a sufficient profit to recompense themselves for the trouble they are put to in keeping up to the department's regulations. The question was engaging the attention of the authorities. Trials were made during the year with Company seed in the southern parts of the Coimbatore district with results of considerable promise. *Pulichai* is no longer a problem of any importance. One small area was reported. It was promptly dealt with and practically ceased to exist. The department again carried out on a large scale the arrangements for purchasing and distributing good Cambodia seed for which there was a very great demand. A special officer was deputed for the purpose and in spite of considerable difficulty was able to purchase nearly 300,000 lb. A start was also made in multiplying the department's own selected stock of Cambodia seed and some 3,000 lb. of it from the Central Farm were sown in the Coimbatore district by contract growers. The most interesting development, which has a great future before it, is to be recorded from the same district where a Cambodia cotton marketing association was formed with the object of establishing definite cotton standards for trading in Cambodia on the lines of those used in other markets and of opening a cotton market at Tiruppur, the centre of the Cambodia trade. Both these objects were partially fulfilled. Work on paddy seed continued along the lines laid down, though in actual figures the bad season made the year compare unfavourably with its predecessors. The department was supplying a very large quantity of seed which was appreciated so well as to be purchased at well over the local market rate. The economic planting campaign was pushed further afield, and with the increased yield obtainable from the use of improved strains of paddy the next question, which was kept prominently to the front, was the use of manures to meet the extra drain on the soil: and the department was doing its best in the matter of distributing a large amount of manure to the

public. Besides the special manuring campaign carried out in the Tanjore Delta, which unfortunately was very largely spoiled by the almost unprecedented failure of the water-supply from the Cauvery, the department carried out extensive propaganda recommending the use of fish manure and fish guano; and the demands for these substances were steadily increasing. The production and sale of green manure seeds were undertaken by the department where necessary; but this side of its work was being rapidly taken out of its hands and ryots were either growing their own supply or a healthy local trade in the seeds had sprung up.

Agricultural associations

134. The record of work done by the agricultural associations was on the whole rather depressing. A few of them did good work, but the rest were more a hindrance than a help and depended for their existence on the personal interest taken in them by a frequently changed district officer. A useful conference between the Co-operative and Agricultural departments was held in Coimbatore in July 1918. One result of this was that the agricultural staff were able to help the Co-operative department in the purchase of oil-cake for their societies by furnishing them with information as to where and when it could best be obtained.

Agricultural engineering

135. In the Agricultural Engineering section more than in any other progress was hampered by the war and consequently very little advance was made in the erection of agricultural machinery. Besides, the energies of the staff were diverted in some measure to munitions work. A certain amount of progress was achieved in erecting new pumping installations; in all cases the machinery was secondhand and represented plant which was transferred from some other place or work. There was a great deal of profiteering over liquid fuel the price of which is not controlled as in the case of kerosene oil. The work of the department in boring for water again showed a gratifying increase in spite of the almost complete impossibility of procuring lining pipes. The work demonstrates the great possibilities that exist of improving the water-supply substantially and trials with new and improved types of drills were carried out by the Agricultural Engineer.

Pumping

Boring

Finance

136. The receipts and expenditure of the department rose respectively from Rs. 1·63 lakhs and Rs. 7·76 lakhs to Rs. 2·2 lakhs and Rs. 10·1 lakhs.

Civil Veterinary department

137. In order to relieve the Superintendent of the Civil Veterinary department of much of his routine inspection work and to enable him to maintain a much closer check on the subordinate staff, the number of Deputy Superintendents' Circles in the Presidency was increased from two to four with headquarters at Vizagapatam, Bellary, Madras and Coimbatore. At the close of the year the department thus consisted of a Superintendent, four Deputy Superintendents, sixteen Inspectors as against fourteen in the previous year, and 124 assistants, as against 113 in 1917–18. Nineteen graduates were newly entertained and two additional Inspectors' ranges were created. One Inspector and three Assistants were on military duty throughout the year. The total number (102) of students on the rolls of the Veterinary College in December 1918 remained at much the same figure as in the previous year. There was greater difficulty than before in obtaining the necessary number of suitable candidates for admission, and in order to meet it the monthly stipend was increased from Rs. 10 to Rs. 15. Twenty-six students appeared for the final examination and nineteen graduated, giving a percentage of 73·0 as against 68·0 in 1917. The Principal of the College was in charge of the office of the Superintendent, Civil Veterinary Department, in addition to his own duties, for five weeks when the latter was on deputation. Two new dispensaries were opened at Devakōttai and Pollachi and the Zamindar of Kangundi opened a private hospital at Kuppam in February 1919. At the close of the year there were 30 hospitals, excluding the Madras Veterinary College Hospital, and 12 dispensaries as against 39 institutions of both classes in the previous year. Owing to a change introduced during the year in the preparation of statistics relating to the work of these institutions

Madras Veterinary College

Hospitals and dispensaries

it is difficult to compare the year's figures of an institution with the corresponding results of the previous year. Nine stations thus show a considerable increase, while a great number of others exhibit a fall in their figures which is ascribed to the unfavourable season, in consequence of which many owners of cattle were unable to take sufficient care of their animals and had to dispose of them. The total number of castrations performed at veterinary institutions rose, by over 550, to 1,990.

Diseases

Cattle mortality from contagious disease was again on the increase and rose, by nearly 6,100, to 76,114, of which no less than 44,164 animals died of rinderpest as compared with 30,733 in the previous year. This disease continued to be severe in much the same parts of the Presidency as in the previous year, i.e., in North and South Arcot, Chingleput, Tanjore, Madura, Tinnevelly and Anantapur. Additional Veterinary Assistants were deputed to these districts and to South Kanara on rinderpest inoculation duty which could not, however, be performed on a more extended scale owing to the limited supply of serum from the Muktesar Laboratory in the United Provinces. At the Coimbatore Agricultural farm there was heavy mortality from this disease amongst the Australian and half-bred cattle. The Superintendent of the Civil Veterinary Department was deputed for about five weeks in October-November 1918 to the Muktesar Laboratory to study the technique and efficiency of the "serum-simultaneous method" of inoculation against rinderpest. After considering the report submitted by him on the subject, the Government permitted him to carry out inoculation by that method on Government cattle in agricultural farms, jails and other institutions. There was a satisfactory decline in the number of deaths due to *Hæmorrhagic septicæmia*, *Anthrax*, *Blackquarter* and *Surra*, while there was a slight rise in the mortality from foot-and-mouth disease. There was still a good deal of slackness on the part of village officers in reporting outbreaks of contagious disease among cattle.

Miscellaneous

One horse fair, eighteen cattle fairs and one cattle show were held during the year. Several other annual cattle fairs including the cattle and pony show at Tiruppūr were not held on account of rinderpest, and many weekly cattle markets were ordered to be closed for the same reason. *The Madras Veterinary Journal*, a periodical of interest to the members of the department, was started during the year under the supervision of the Superintendent.

WEATHER AND CROPS

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Season and Crop Report for fasli* 1328; *Agricultural Statistics of India; Estimates of Area and Yield of certain principal Crops in India*]

Rainfall

138. The season was on the whole unfavourable from an agricultural point of view. The south-west monsoon commenced unusually early about the middle of May with very heavy rains on the West Coast and good showers in Ganjām, Vizagapatam, the Deccan, the Carnatic, the Hills and the Central group of districts except Coimbatore and Trichinopoly. In June the rains were considerably deficient in the majority of districts and July and August also proved disappointing in nearly all the districts. In September there were good showers in Guntūr, Nellore and the Deccan. On the whole the total rainfall during the period from June to September was below the average throughout the Presidency. In consequence the area under cultivation was, with the exception of a few districts, much below the average of the previous five years, the deficiency in the Deccan being most striking, the percentages of decrease under first crop dry and first crop wet amounting to 78 and 73, respectively. The situation was rendered still worse by the delay in the setting in of the north-east monsoon. In October there were scarcely any rains worth mentioning in

the Circars, the Deccan, the Carnatic, Chittoor and North Arcot. It was only in November that the north-east monsoon commenced in right earnest and the rainfall during that month was above the average in all the districts except Ganjām and Vizagapatam (Agency). In December the rains continued to fall steadily up to the first week, but became lighter thereafter, giving a few fitful showers up to the third week when the monsoon ceased. The total rainfall during the period from October to December exceeded the average in the Carnatic, the South, Coimbatore, Trichinopoly, the West Coast and the Hills and fell short of it elsewhere. The dry weather rains of January exceeded the average in most districts, in February and up to the middle of April there was a spell of fine weather which changed thereafter bringing fair or light showers up to the end of May.

Crops

139. Owing to the failure of the south-west monsoon and the lateness of the north-east dry crops with few exceptions were bad all through. The useful showers of January brought about a change for the better in most of the tracts affected and the only districts in which relief operations under the Famine Code were found necessary were Ganjām and Kistna. In the latter district distress was slight and was confined to a portion of one taluk which did not pass the stage of test. In the former, on the other hand, distress was severe and more widespread and an area of more than a thousand square miles in the northern portion had to be classed as famine area. The unfavourable character of the season as a whole necessitated the grant of seasonal remissions on a somewhat large scale in the Circars, Kurnool, Bellary, Chingleput, South Arcot, Salem and Madura, while in parts of the Ganjām district the remission of rain-fed assessment also had to be granted. The area under first crop cultivation was 31,770,000 acres as against a normal extent of 34,350,000 acres. The total cropped area was 36,047,000 acres against a normal area of 39,032,000 acres. There were marked decreases in the case of all the principal crops due generally to the unfavourable season, the raising of dry crops on wet lands and the preference shown by ryots in certain districts to the cultivation of cotton. Increases occurred only under cotton, sugarcane and tobacco. In the case of the first-named crop the increase amounted to not less than 861,121 acres. The increase in respect to each of the other two crops was about 20,000 acres and less and was due to the prevailing high prices.

HORTICULTURE (1918–19)

[*G.Os. No.* 1253, *Revenue (Special), dated the 27th June* 1919, *and No.* 2011, *Revenue, dated the 27th August* 1919. *Report of the Agri-Horticultural Society of Madras for* 1918–19]

Government Botanic Gardens and Parks, the Nilgiris

140. The year commenced well as regards rainfall. The month of May was unusually wet. At Ootacamund the rainfall for the year was only a few inches below the average. At Sim's Park it was 22 inches over that of the previous year. At Burliar and Kullar also it was much higher. The closing months of the year were very dry in all the gardens. Frost did little damage at Ootacamund and none at Sim's Park, Coonoor. Labour continued to be scarce, expensive and unsatisfactory, but the gardens were more attractive than usual owing to the wealth of bloom brought about by favourable weather conditions. Among the new plants that flowered was *Lonicera hildebrandu*, a giant honeysuckle from the Shan Hills, which used to be annually injured by frost. Another plant from the Shan Hills, which is thriving beyond all expectations, is *Lilium sulphureum*, one of the finest of the genus. It grows to a height of nine feet, the trumpet is nearly a foot long and the colour of the flower is sulphur yellow. Nine other species of new plants raised from seeds also flowered during the year. The conservatories were maintained up to their usual standard and were a great attraction to visitors. The ferns brought

from England in 1914 have grown into fine specimens, especially the Davallias and Nephrolepis. Many of the orchids flowered and *Angraecum sesquipidale*, a curious orchid from Madagascar, which has a spur 18 inches long, attracted considerable attention and a reference was made to it in the daily papers. There is a growing demand for seedlings and plants from the gardens. Many species of medicinal plants were tried, but only *Digitalis purpurea* (Foxglove) and *Chenopodium authelminticum* thrived. The experiments with these plants were on the whole disappointing. At Sim's Park, Coonoor, the usual works were carried out, such as cleaning the lake, top-dressing the lawns, and maintaining the flower-beds and borders. In the orchard an endeavour was made to raise a number of peach seedlings for grafting purposes. The fruit trees were growing well with the exception of pears, apricots and nectarines. The orange trees thrive best and the apples also grow satisfactorily. In the Burliar experimental garden the most noteworthy event was the fruiting of the durian trees *(Durio zibethinus)*. About 50 fruits ripened, and although a few were sold the fruits did not find favour with the public, most probably on account of their not very appetising odour. The mangosteen trees produced an excellent crop of fruit which yielded a good revenue. Other fruits, such as plantains, oranges, mangoes and nutmegs were collected and sold. In the Kullar experimental garden considerable damage was done by heavy rains in October and most of the time of the coolies was taken up in repairing this. No rubber trees were tapped owing to labour difficulties and the poor price of rubber. There was no demand for Para rubber seedlings. The orange trees yielded a very poor crop of fruits. Wild pigs continued to play havoc in the garden, and on one occasion there was a visit by wild elephants which made short work of a plantation of bananas. The coffee plants at Benhope were on the whole growing well. The work of hybridising had not commenced. The receipts in all amounted to Rs. 7,749 and the expenditure to Rs. 27,695.

The Agri-Horticultural Society, Madras (1st January 1918 to 31st March 1919)

141. In the Agri-Horticultural Society's garden at Madras there was practically no rain from January to March; in February the whole of the tanks in the ornamental gardens were very low and water had to be taken to fill them. As usual several thousands of seedlings of annuals were raised, but the heavy fall of rain in the beginning of November 1918 followed by a severe storm did considerable damage to a large number of them. The *Rosarium* in the nursery gardens was maintained in good condition but here also the seedlings were destroyed by the trees falling on them during the storm. The plants of Avocada pear, peaches, plums and figs were growing fairly and should come into flower and fruit soon. The income of the Society from all sources for the fifteen months January 1918 to March 1919, excluding the Government grants, was Rs. 17,265, or Rs. 1,006 more than the amount realized during the corresponding period of 1917–18. The Government grants amounted to Rs. 8,100. The expenditure was Rs. 25,670 and the year closed with a balance of Rs. 982 against an opening balance of Rs. 1,041. The fall is due to the rise in expenditure generally owing to high prices of materials and increase in wages of labour and staff. The eightieth annual exhibition of flowers, vegetables and fruit was held in the Nursery Gardens of the Society on the 22nd February 1919. In conjunction with it, the second All-India Poultry show was also held. The former was smaller than in previous years, due to the damage done by the storm in November 1918 to seedlings raised in October, but the latter was pronounced to be an unqualified success in every respect.

Government cinchona plantations

142. In common with other places the monsoon rainfall was scanty on the Government cinchona plantations and this had naturally an adverse effect on the young plants of the new clearings. The total area under cultivation in the beginning of the year was 1,185 acres, and after allowing for the uprootal of old areas and the planting of new there were 1,348 acres of cinchona trees at the end of the year, of which the Dodabetta plantation comprised 252 acres and the Naduvattam plantation 1,096 acres. An experiment was started during the year on an extent of 40

acres to test the value of silver oak as a soil rejuvenating agent. Some ten years ago following on the uprootal of a mature block of cinchona trees this area was planted up with silver oak. These latter have in turn been cut down and the young cinchona plants planted in their place are exceedingly healthy in appearance. A scheme of reafforestation on these lines has been prepared for the whole plantations. The long drought proved baneful to the several species experimented with in the plantations excepting *Acacia melanoxylon*. As there was sufficient dry bark in the godowns, the policy of harvesting only a minimum amount was continued, the actual quantity taken from both the plantations being 44,141 lb. or a little over one-half of the previous year's harvest. Owing to a disastrous fire which occurred in the Quinine factory in February 1919 and to other causes, the output of sulphate of quinine only totalled 23,242 lb. as against 55,014 lb. in the previous year. The total quantity of bark worked up in the factory was 707,194 lb., of which the average analysis was 3·66 per cent of quinine sulphate as against 4·59 per cent in the previous year. Compared with the laboratory analyses, the factory outturn works out at 91 per cent which is a satisfactory figure in view of the fact that the barks worked up in the year contained much cinchonidine the separation of which from quinine is a matter of considerable difficulty. The cost of extraction of quinine sulphate was Rs. 4·9 per lb. In all 39,634 lb. of factory products were sold during the year. The gross receipts were Rs. 7·39 lakhs and the total expenditure was Rs. 3·70 lakhs. Experiments were made during the year to determine the suitability of the plantation for the growing of certain medicinal plants on a commercial basis, but the results obtained were not promising. During the year the report of Colonel Gage, I.M.S., on the question of the possibility of obtaining enough suitable lands in the Indian Empire to produce cinchona bark adequate for the requirements not only of India but also of the British Empire in the matter of quinine was made available to the public. If, as a result of this, an Imperial Cinchona department is constituted, the Madras Cinchona department will cease to exist.

Quinine factory

Finance

FISHERIES

(1ST JULY 1918 TO 30TH JUNE 1919)

[*Report of the Fisheries Department for* 1918–19*; G.O. No.* 1755, *Revenue (Special), dated the* 15*th September* 1919]

143. In the course of the year the department of Fisheries was reorganized under the charge of a full-time Director, the Honorary Director, Sir Frederick Nicholson, to whose far-sighted initiative it owes its origin and present industrial and economic importance, being relieved of all his duties excepting the supervision of the West Coast section as Honorary Superintendent. The technical staff was enlarged by the engagement of a Marine Assistant charged with the control of the departmental fisheries together with the supervision of the Tuticorin fish-farm, the introduction of better boats and methods into the inshore fisheries of the southern districts and the oversight of the department's fleet of launches and boats. Among the important features of the year's working mention may be made of the transfer to the department of a number of fish curing yards on the West Coast from the Salt department to be run on model lines, the reorganization of the Aquarium, the control over which was recently transferred to the Department of Fisheries, and the initiation of a special scheme for the education of fisher children and the training of their teachers. The scientific assistance and advice of the department were again in demand during the year by officers concerned with fishery development in several other States, notably, Burma, Baroda, Travancore and the Seychelles; zoological collections were also

General

furnished to researchers in various countries. After his appointment in November 1918 the new Director spent 148 out of 216 days on tour.

West Coast section

144. The operations on the West Coast were on the usual lines, but were hampered both by war conditions and by the poor supply of fish. The cannery at Chaliyam produced a slightly larger pack than in the previous year, but the sardines, though very abundant, were generally of miserable canning quality. Great difficulties were also experienced in obtaining supplies of tin plate and proper packing oils. Mackerel were comparatively rare on the South Malabar Coast and at the end of the year there was almost a nil balance of this favourite article in the department. Prawns also were singularly absent. Little work could be done in experiments other than those of canning operations owing to war conditions and the consequent impossibility of obtaining plant and metals. The vacuum drier was run successfully in thoroughly drying the fish, the refrigerator was not in use and the solar oven was worked as usual and continued to bake lacquered cans. At the Tanur experimental yard much the same conditions as to fish obtained as in the previous year. The manufacture of oil and guano pursued a routine course, returns being nearly the same as in the previous year. The number of private oil and guano factories reached the large total of 358, but many of these are so badly constructed and insanitarily conducted that there is pressing need to place them under sanitary control and inspection. Another difficulty occurred owing to the deliberate adulteration by some of the smaller factories of guano with sand which tended to spoil the market. A set of rules was accordingly drawn up for the licensing, proper working, and due inspection of the factories. In South Kanara, the fish were more abundant than in Malabar and in better oil condition. Considerable business was done during the year in buying fish oil for the Munitions Board and guano for planters.

Pisciculture work

145. The department has three piscicultural establishments where fish for the stocking of tanks and other waters are bred. These are at Sunkesula, Ippur and the old Powder Factory in Madras. All of them continued to give successful routine results. At Sunkesula both Gourami and Etroplus bred freely; 53 young Gourami were transferred successfully to Ippur while 964 young Etroplus were distributed to selected tanks in the Ceded districts and to the Kurnool-Cuddapah canal. Supplies of live-fish obtained from the growing grounds at Edurur and elsewhere were regularly forwarded by the farm staff to the supply ponds at Kurnool, and therefrom delivered to the contractor. At the Ippur farm insecticide fish were bred largely, but only 30,000 were indented for by municipalities and other public bodies. They do not yet appear to realize adequately either the value of this help in fighting the mosquito scourge or the need to get approved strains when they do stock mosquito infected waters with insecticidal fish. The Powder Factory pond at Madras continued to give highly satisfactory results. Here, as in the Sunkesula farm, both Gourami and Etroplus bred freely. In the absence of suitable feeding grounds near Madras 37 young Gourami were transferred to Ippur together with 200 Etroplus. In addition ten permanent tanks in the Presidency were stocked with young Etroplus from these ponds. A number of thick-shelled river mussels of a large species from Dacca was obtained during the year and stocked on one of the ponds with a view to their introduction into this Presidency where no species exists having a shell thick enough for button-making. Several important development schemes were sanctioned during the year, of which the greatest are the Mopad and the Kanigiri-Duvvur schemes. These tanks will be fished departmentally, the head of fish being kept up by stock introduced periodically. In the second scheme boats hitherto never used on these great sheets of water will be provided for the use of the local fishermen who will be taken in the service of the department and taught improved methods; by these means it is hoped to provide greatly increased fish supplies to the towns and villages of the neighbourhood and at the same time to train and improve the status of the fisherfolk. The

lease of the fishing rights in the tanks and rivers stocked and improved by the department resulted in the satisfactory profit of Rs. 31,316 as against Rs. 23,691 in the previous year.

146. The experiments started in the previous year in fishing Madras waters with Malabar canoes and crews were continued and two additional canoes were obtained from the West Coast with their complement of crews, nets and lines. The operations resulted in the capture of over 83,000 fish in a period of six and a half months. In spite of the opposition set up by the local fisherfolk the department was able to secure the services of four local fishermen to work in these canoes. On the whole the results were not sufficiently encouraging from a financial point of view. The exposed and surf-beaten nature of the Coromandel Coast makes improvements in fishing methods extremely difficult, and except at harbours such as Madras, Negapatam and Cocanada and a few other places it is not worthwhile replacing the catamaran by any better type of seacraft. The two ponds at Kurnool for storing live fish pending sale were completed during the year and the results of the departmental fishing of the Puduparti and Ippur-Kamini tanks were satisfactory. **Fishing experiments**

147. The chank fishery reached its full development during the year. All the beds were accurately located and the average annual quantity of shells that may be fished without causing depletion or decrease in size was ascertained for each. From this it appears that the Rāmnād beds are capable of yielding $2\frac{3}{4}$ lakhs, while those of Tinnevelly can give without deterioration about $2\frac{1}{4}$ lakhs, if an adequate labour force be recruited. The chank fishery was specially remunerative because of increased catches on the Rāmnād coast and of the high rate payable under the current sale agreement (Rs. 325 per thousand as against a previous rate of Rs. 121). The total catch of chank shells was 435,262 as against 391,137 in the previous year. A fleet of nine canoes manned by 63 divers and ten mundaks was despatched to Ceylon in two batches during July and August 1918 to participate in the Ceylon fishery. The results obtained were, however, not satisfactory in any way. The beche-de-mer industry showed a great revival, conditions in 1918 having been specially favourable to the propagation of this animal. No pearl oysters were found anywhere on the Tinnevelly banks and there are no signs of repopulation in the immediate future. Public appreciation of the edible oysters supplied from the model oyster park at Pulicat increased greatly. A small profit was made. The supply of zoological specimens to colleges progressed satisfactorily, the sales amounting to Rs. 1,248. A scheme for the reorganization of the exhibits in school museums, illustrative of the fauna of Indian seas, was drawn up and approved by the Director of Public Instruction. Under this scheme a very large number of schools will be provided with typical collections of common marine animals, each species identified and labelled and the whole accompanied by a descriptive hand-book. **Marine work**

148. Co-operation made very good headway during the year. From ten societies in the beginning of the year the number rose to 42 at its close. Of the 32 new societies, 29 were organized on the West Coast where this movement has taken strong hold. Two of the new societies were for the co-operative production and sale of cured fish, oil and guano. Special attention was directed to co-operative propaganda on the East Coast where the fisher people are less advanced than their brethren in Malabar and South Kanara. The year was notable in respect of the initiation of an educational scheme whereby schools will be opened in fishing villages under teachers specially educated in a training institute now established at Calicut. Considerable success attended efforts made to assist temperance movements among fishermen. **Socio-economic work**

FORESTS

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Annual Administration Report of the Forest Department of the Madras Presidency for the year ending the 30th June 1919; Statistics of British India, Vol. II, Financial Statistics, Part II, Forests*]

Area

149. Some seven square miles, mostly in Nellore, Trichinopoly, North Malabar, South Malabar and South Coimbatore, were constituted reserved forests during the year, and in pursuance of the policy recommended by the Forest Committee of abandoning small and isolated reserves, about 91 square miles were disafforested chiefly in Kurnool, South Arcot and Chittoor. There was a decrease of 125 square miles in the total area of reserved forests, which stood at 18,712 square miles at the close of the year. Certain forest lands in Guntūr and Anantapur suitable for colonization were disafforested and assigned for Indian soldiers who had distinguished themselves in the war.

Forest settlement

The area of reserved lands rose from 668 to 682 square miles. About 83 square miles, chiefly in the Agency tracts of Gōdāvari and in Nellore, were notified under section 4 of the Forest Act and over 7 square miles were notified under section 16. Out of a total area of 496 square miles which awaited settlement at the close of the year, the Northern Circle alone accounted for an area of 418 square miles consisting of three large blocks in the two Gōdāvari divisions.

Demarcation

About 118 miles of forest boundaries, or nearly double that of the preceding year, were newly demarcated and the length of old boundaries repaired was 17,368 miles as against 17,996 miles in the previous year. The revision of boundaries between the Nilgiri and Coimbatore districts was completed and the work of verifying and demarcating forest boundaries in the former district was resumed during the year.

Survey

The Survey of India continued its operations on a small scale in the Nellore district and about 12 square miles were surveyed on the two inches to a mile scale.

Working plans

Working plans covering an area of 191 square miles were sanctioned during the year against 273 square miles in the previous year. The total area under working plans sanctioned by the Board of Revenue up to the end of the year is 8,312 square miles. Revised working plans covering an area of 1,718 square miles were under preparation by District Forest Officers. No real advance in the preparation of scientific working plans is possible at present for want of experienced officers; but some progress was made in revising existing plans.

Communications and buildings

150. The present system of carrying out road and building works under a five years' scheme was abandoned as unworkable. The outlay on roads and bridges decreased from Rs. 1·55 lakhs to Rs. 1·47 lakhs, while that on buildings rose from Rs. 1·16 lakhs to Rs. 1·34 lakhs, but all expenditure was kept as in the previous year within the lowest limits. A road from the plains to Komattiyur on the Javadi Plateau (the Gillman road) constructed at a cost of Rs. 1·20 lakhs was opened during the year, and on the same hills some progress was made on the construction of the Amerdi-Nadanur Ghat road at a cost of Rs. 0·17 lakh. The outturn of work by the present bullock power tramway in the Tekkadi forests was 8,941 ton-miles against 9,584 ton-miles in the previous year. The expenditure under "Miscellaneous Works" increased from Rs. 8,514 to Rs. 10,466. The chief works consisted, as usual, of the construction and repair of tanks and wells. On the Javadis well-boring operations were carried out at five places and a protected draw well at Muttanur on the Yelagiris was under construction.

Protection of forests

151. The new cases of the year decreased, by 931, to 26,160 and were 2,528 less than the average of the three preceding years.

Offences

Unauthorized felling, as usual, formed the largest head of forest crime in all the circles, the Southern circle contributing nearly 47 per cent of the total. Unauthorized grazing cases increased in all the circles, notably in the Central circle, which contributed 50 per cent of the total number of offences under this head. They were most numerous in the districts of Guntūr, Nellore and Chittoor.

The percentage of cases taken to court, compounded and detected were 27·10, 67·75 and 5·15 as against 24·16, 68·59 and 7·25, respectively, in the previous year. The total number of cases disposed of by magistrates slightly rose from 6,671 to 6,867. Of these no less than 92·50 per cent ended in conviction as against 91·66 per cent in the previous year. About 52 per cent of the cases were compounded and the compensation fees realized amounted to Rs. 1·57 lakhs as against Rs. 1·73 lakhs in the previous year. The average compensation fee per case was Rs. 10–12–3 against Rs. 10-0–8 in the preceding year. The rules sanctioned by Government for the guidance of Forest officers in compounding offences were generally observed. Rewards amounting to Rs. 592 were granted to informers and subordinates as against Rs. 1,122 in the previous year. The Nilgiri Game Association paid Rs. 88–4–0 to subordinates for detecting cases of poaching. The total area over which special fire protection was attempted was 7,207 square miles as against 7,142 square miles in the previous year, of which 532 square miles were burnt, the percentage of failure falling from 9·7 to 7·4. Instances of deliberate incendiarism occurred in the districts of Kurnool, Bellary, North Cuddapah and Tinnevelly. In some cases reserves were closed to grazing as a punishment for fires, while in others grazing fees were enhanced or the privilege of free removal of grass withdrawn. The co-operation in fire protection of the hill tribes, wherever they are amenable to influence, continued to be a satisfactory feature of the administration, especially in Ganjām, Vizagapatam and on the Javadi hills. In Kurnool, on the other hand, the Chentsus were responsible for burning immense areas of forest, and fire protection in the Upper Gōdāvari division was very unsuccessful. Of the total area of forests in the Presidency, about one-fourth was closed to grazing either wholly or for portions of the year. To the open area of nearly 14,000 square miles of forest, permits were issued for the grazing of 2,117,523 animals, a fall from the previous year's number of no less than 365,069. These figures suggest an average incidence of $4\frac{1}{4}$ acres of grazing to each animal, in itself a very small allowance under Indian conditions. Attempts were made during the year to introduce into the districts of Guntūr and Chingleput the kancha system of grazing which is applied to a very large area of grazing grounds in the Nellore district. The chief features of the system are the closing of the grazing grounds until the grass crop has matured, the reservation of grazing to the more valuable cattle and the elimination of the sheep until the horned cattle have had the full benefit of the grazing. A second reform in process of introduction during the year was the raising of the grazing licence fee with a view to reducing the incidence of grazing and permitting the more valuable cattle required for agriculture to benefit by the always limited forest resources. Owners of plough cattle would pay considerably more than the present charge if there was any assurance of their bullocks obtaining good grazing for a portion of the year free from risk of infection. The enhancement of grazing fees was sanctioned in a considerable number of districts and the revenue derived rose from Rs. 7·40 lakhs to Rs. 8·24 lakhs.

Fire protection

Grazing

152. Clear felling and artificial regeneration were carried out on the usual scale at Nilambur and the only departure from normal activity consisted of somewhat spasmodic attempts made in many districts to spread the cultivation of sandal, red-sanders and *Cassia auriculata*. In order to study the problems connected with the clear felling of high forest and concentrated regeneration of the area felled the post of a Research Officer as Sylviculturist was sanctioned during the year.

Sylviculture

153. The quantity of timber removed by departmental agency and by contractors amounted to 22,200 tons and 72,175 tons, respectively, as against 15,800 tons and 84,775 tons in the previous year. In the Western circle 23,000 cubic feet of timber were supplied from Malabar and South Coimbatore divisions to the Indian Munitions Board for ship-building and about 26,000 cubic feet of miscellaneous species were supplied from North Malabar and South Coimbatore forests for the construction of piles, bridges and landing piers in Mesopotamia. Some 8,524 cubic

Exploitation

Timber

feet of teak was delivered to Messrs. George Brunton and Company, Cochin, for the construction of a steamer, and a quantity of *Grewia tiliaefolia* logs was utilized by the Buckingham and Carnatic Mills Company, Limited, for the manufacture of tent poles for military use. A large quantity of teak was sold for building native crafts, and sal sleepers and scantlings were supplied from Ganjām to the Munitions Board and to the Public Works department. The quantities of fuel removed departmentally and by contractors, respectively, were 32,200 tons and 422,778 tons as against 26,775 tons and 534,550 tons in the previous year. The value of bamboos sold was Rs. 2·77 lakhs as against Rs. 3·12 lakhs in the previous year, the decrease being probably due to the absence of wagons and the uncertainty of the season. The value of bamboos extracted departmentally increased by Rs. 0·18 lakh. Kurnool West, which provided employment for the Chentsus, was one of the chief centres of departmental collection. In the auction sales held at Satyamangalam in the Western circle in December 1918, 219 tons of sandalwood were sold for Rs. 2·81 lakhs and in the sales held at Tiruppattūr and Vellore 213 tons were sold for Rs. 3·04 lakhs. The total income realized during the year was Rs. 6·18 lakhs. The working of the timber and sandalwood transit rules was satisfactory. The people generally availed themselves of the privileges allowed by the rules under section 26 of the Forest Act and there were no complaints of any importance except in Trichinopoly, where damage was done by felling and burning unreserves for "ponakad kumeri" cultivation on the hills. The departmental supply of hay to the Military Farms department, 9th (Secunderabad) Division, amounted to 4,698 tons and a sum of Rs. 1·41 lakhs was credited while 6,156 tons were removed by the Military Farms department on payment of Rs. 0·12 lakh. The collection of tanning bark was continued under the agency of the Munitions Board. The total quantity collected was 11,713 tons. The current year's rental was Rs. 4·78 lakhs and the department obtained credit for Rs. 2·62 lakhs. The value of minor produce extracted by departmental agency and by purchasers amounted to Rs. 1·69 lakhs and Rs. 18·76 lakhs, respectively, and decreased by Rs. 0·33 lakh and Rs. 0·65 lakh during the year under report. The value of removals under both the heads decreased by Rs. 2·21 lakhs in the Central circle consequent upon the stoppage of departmental operations and other causes. This large decrease was, however, counterbalanced by slight increases in the other circles, chiefly on account of war activities, such as the supply of hay, tanning stuffs and beeswax for military purposes. The estimated value of forest produce removed by right holders was Rs. 0·37 lakh against Rs. 0·52 lakh in the previous year and the value of produce granted free amounted to Rs. 0·37 lakh against Rs. 0·40 lakh in the previous year.

Fuel

Bamboos

Sandalwood

Hay

Tanstuffs

Finance

154. The total gross revenue amounted to Rs. 49·17 lakhs, a decrease of Rs. 4·99 lakhs over that of the preceding year, which was principally due to the assumption of control of tanning bark by the Munitions Board and to the restrictions of railway transport. The total expenditure increased from Rs. 29·20 lakhs to Rs. 31·32 lakhs and the net surplus amounted to Rs. 17·85 lakhs as against Rs. 24·97 lakhs in the previous year.

Research and experiments

155. The only research work undertaken was connected with the causes and incidence of the spike disease of sandalwood. Under the orders of the Board of Revenue the Director of Agriculture instructed the Government Entomologist to carry out the experiments in lac cultivation on *Butea*, *Zizyphus* (Jujuba) and *Pterocarpus* trees in the Sadivayal valley of the Central Coimbatore division. Attempts to inoculate *Zizyphus* and *Butea frondosa* trees with lac were continued in West Kurnool and Central Coimbatore. The experiments were successful to the extent that a few trees were impregnated.

Miscellaneous

156. The reorganization of the subordinate forest staff was sanctioned by the Secretary of State during the year. The recommendations of the Public Services Commission with regard to the Imperial and Provincial Forest Services were communicated with the Government of India's views to the Madras Government during the year; and the Committee of

Forest Officers appointed to consider the subject submitted their report in January 1919. The Chentsu question again presented considerable difficulties. Owing to a number of factors, such as high prices, food scarcity in the Nallamalais almost amounting to famine, failure to provide suitable permanent work, want of provision for the maintenance of the women and children at the Gudems, and the general absence of sufficient control during a particularly difficult period, the Chentsus got out of hand and were responsible for a great deal of crime. The Special Chentsu Officer never relaxed his devoted efforts on behalf of this unfortunate tribe and did all that could be done at the cost of his health and in most disheartening and difficult conditions. But circumstances were too strong for him and many of the best behaved Chentsus were led away by the bad characters in the tribe to a life of theft and dacoity. The department was throughout the year extremely shorthanded in the higher ranks and officers had to be employed in charge of divisions without the knowledge or experience necessary to manage them satisfactorily; but with one or two exceptions all of them did their best.

Forest College, Coimbatore

157. The college continued to work satisfactorily. Out of the 28 students who sat for the final examination two Government students won the honours certificate. Twenty students obtained the higher standard certificates and six the lower standard. While no students showed exceptional ability, the men at the bottom of the list were above the average and there were no failures. The final examinations in all the subjects were conducted by examiners from outside the staff of the college and the results were satisfactory. The 1918—20 class started with 33 students and closed with 30. By the close of the first term three men who were found unfit to continue the training were removed. The Inspector-General of Forests visited the college and the students of both the divisions at Nilambur in December 1918.

MINES (1918)

[*G.O. No.* 856, *Revenue (Special), dated the 2nd May* 1919 ; *Statistics of British India, Vol. I, Commercial Statistics—Mineral Production*]

Output

158. As in the previous year mining was carried on only in five districts—Anantapur, Kurnool, Nellore, Salem and Vizagapatam—and the minerals raised consisted of gold, manganese, magnesite, mica, steatite and barytes. The quantity of steatite raised, viz., ten tons, was the same as in the two previous years. The output of barytes, a new mineral product raised in the Kurnool district during the year, was 1,200 tons. The quantity of magnesite extracted fell considerably from 16,048 tons to 5,773 tons, the decrease being due to the reduced demand for the mineral. The output of manganese and mica increased by 548 tons and 23 tons, respectively, to 2,230 tons and 321 tons. There was a decrease in the output of gold, due to the suspension of mining operations in two mines in Anantapur. From a total quantity of 28,470 tons of quartz raised during the year, 17,831 ounces (troy) of fine gold and 1,169 ounces (troy) of fine silver were extracted. There was thus a further reduction of 2,810 ounces in the total output of both the minerals as compared with that of the previous year.

General condition of the employees

159. Vizagapatam, Kurnool and Salem were free from epidemics. There were two fatal cases of cholera in Nellore. Fifteen cases of small-pox, of which eight proved fatal, and two fatal cases of cholera were reported in Anantapur. There were also fifty deaths from influenza amongst the mining population of the same district. The general health of the employees elsewhere continued to be good. The rates of wages paid to labourers in the districts of Vizagapatam, Anantapur and Nellore were practically the same as in 1917, but adult males in Nellore were paid from As. 3 to As. 8 a day and the wages of maistris employed at the North Anantapur gold mines fell from Rs. 1-14-0 to Rs. 1-4-0. In Salem

Wages

there was a slight rise in the wages of women and children in the magnesite works and of the surface coolies in the mica mines. The supply of labour continued to be sufficient throughout. Neither women nor children were employed below ground in Anantapur or in the mica mines of Salem. The steatite mines in Kurnool continued to employ women below ground and children were so employed in the barytes mine in the same district. Both women and children were employed below ground in Vizagapatam, Nellore and the magnesite mines in Salem. During the year accidents, involving the death of two persons and serious injury to eight persons, occurred in two mines in the Anantapur district. In the magnesite mines in Salem one was seriously injured. There were no accidents in Vizagapatam, Nellore or Kurnool.

Employment of women and children

Accidents

MANUFACTURES (1918–19)

[*G.Os. No.* 690, *Revenue (Special), dated* 11*th April* 1919, *No.* 1131, *Revenue (Special), dated* 6*th June* 1919, *No.* 1346, *Home (Judicial), dated* 12*th June* 1919, *No.* 1221, *Revenue (Special), dated* 21*st June* 1919, *No.* 1647, *Revenue (Special), dated* 28*th August* 1919, *and No.* 2092, *Revenue (Special), dated* 14*th November* 1919; *Statistics of British India, Vol. I, Commercial Statistics*]

General

160. There were nineteen cotton mills in the Presidency, or one more than in 1917–18, four of which worked as in the previous year in the French Settlement of Pondicherry and one in the Cochin State. These gave employment, on the average, to over 29,000 hands daily and had over 4,400 power looms and nearly 479,000 spindles at work. All except two of these concerns were worked as Joint Stock Companies. There were besides these, six spinning and weaving concerns in Malabar and South Kanara which were not classed as mills and were not worked by mechanical power. Owing to the rise in the price of thread there was a fall by over 500 in the number of persons employed by these latter concerns. During the greater part of the year the Buckingham and Carnatic Mills, Madras, continued to be engaged practically to their full extent in the manufacture of khaki drill, cloth and tape and other materials of a similar kind for the Army. The Anglo-French and the Coimbatore Spinning and Weaving Mills were also engaged on large orders for pugrie cloth and dusootie, respectively. In October 1918, at the instance of the Controller of Textiles, the organization of army blankets in the Ceded districts was undertaken by the Department of Industries. The tape weavers of Chintadripet were organized by a local firm for the production of khaki webbing and tape, and large supplies of these materials were made during the year. The three jute mills in the Vizagapatam, Kistna and Guntur districts continued to work and gave employment to nearly 3,000 operatives daily. There were 24 tanneries and two leather works. Both the latter and three of the former came under the Factories Act. Nearly 4,000 operatives were employed in all these concerns. Very large quantities of East Indian kips produced at Madras were exported direct to the War Office in London, and a large proportion of the 'uppers' leather used in the United Kingdom for the manufacture of boots for the British and Allied armies continued to be supplied from East Indian kips, tanned mostly in the Madras and Bombay Presidencies. The export of hides was under War Office control as in the previous year. War Office purchases averaged 7,000 bales a month, their value exceeding Rs. 650 lakhs. At the close of the year information was received from England that there were large accumulations of non-army tanned hides and tanners largely reduced their production in order to avoid a serious slump when Government purchases ceased. Most of the tanners therefore either curtailed their production of tanned hides or turned their attention to the tanning of skins. The prohibition of the tanning of goat and sheep skins was not

Spinning and weaving

Jute mills

Leather

withdrawn until the beginning of 1919. But the export of accumulated stocks of tanned skins was permitted in September 1918. The whole of these stocks were sold during the year at exceptionally high prices. Eighteen concerns, all on the West Coast, including the Native States of Travancore and Cochin, were engaged in the manufacture of coir rope, mats and matting, of which six came under the Factories Act as in the previous year. There were 14 coffee works of which 13 continued to be classed as factories under the Act: and 147 cotton ginning and pressing mills which employed over 13,600 operatives. The number of rice mills which worked during the year amounted to 145 of which 142 came under the Act and the number of operatives employed by these was 8,500. There were 38 concerns engaged in tile and brick making which employed 7,000 hands; nine sugar factories which employed over 3,800 hands; and ten rubber works, all in the States of Travancore and Cochin, which gave employment to over 4,400 hands. Besides sundry other industries there were 16 Government and Local Fund factories in which over 8,000 operatives were employed.

Coir

Coffee works

Cotton ginning

Rice mills

Tile and bricks

Sugar

Rubber

161. The year commenced with 468 factories on the register. Of these two were struck off because they were dismantled and 16 new factories were added. There were thus 482 factories at the end of the year. The factories newly registered comprise seven rice mills, four cotton presses, a saw mill, a cotton ginning factory, a Local Fund workshop, one engineering works and a brewery. The average daily number of operatives employed was 99,059, or 3,139 more than in the previous year, of whom 24,388 were employed in cotton spinning and weaving mills and 2,951 in jute spinning and weaving mills. The number of female operatives fell from 16,214 to 15,818, but the number of children employed rose from 7,274 to 7,695, the increase occurring entirely under boys. Every child employed in places where mechanical power was used was duly certified and the system of certification of children worked satisfactorily. The health of the operatives continued to be good. A few of the larger factories had their own medical staff and equipment. The sanitation of factory premises showed considerable improvement during the year. Two factories at Tiruppūr in the Coimbatore district provided free housing accommodation for their permanent staff. As compared with 1917 there was a slight increase in the average rate of wages which obtained in factories generally, but the wages of skilled labour outside factories continued to be considerably higher than those prevailing inside them: and factory managers experienced the usual difficulty in securing unskilled labour during the agricultural season. There were nine strikes during the year. Five of these occurred in textile factories in Madura, Tinnevelly and Madras, one in a ginning factory in Coimbatore, one in a tile factory in Malabar, one in the Tramway workshop and another in an Engineering workshop in Madras City. All of them excepting one were for higher wages and shorter hours and lasted only for short periods. They were settled either by compromise or by the men resuming work unconditionally. The one in the Engineering workshops, Madras, was consequent on the dismissal of a turner and ended in his reinstatement. There were three fires during the year. In 408 factories, or two less than in the previous year, an interval of half an hour's rest was allowed after every six hours' work and 33 factories, or five more than in 1917, worked by a system of shifts. In the case of the latter due precaution was taken to see that sufficient lights were provided throughout the factory premises, that no woman was allowed to work more than the statutory period and that no woman or child was employed beyond the prescribed hours. The number of accidents fell slightly from 422 to 409 but the number of fatal accidents continued to be nine.

Factories (1918)

162. The energies of the Department of Industries continued to be concentrated on the supply of munitions for the first half of the year and on the termination of the war it has found it possible to devote attention to problems of industrial development. The Madras Presidency not

Department of Industries

GENERAL

being rich in mineral wealth, industries have for the most part to be dependent on agricultural products and their utilization. The questions occupying the forefront of the department's programme are the treatment of vegetable oils, the manufacture of leather, mechanical engineering as applied to agriculture and hand-loom weaving. Interdependent on these is the question of technical education, the control of which has gradually been transferred to the department. An investigation into the methods of groundnut decortication was carried out during the year and a considerable amount of information and much valuable data were collected. The hand-shelled nuts are spoiled during the voyage to Marseilles and the oil produced from such kernels is rancid and bitter and is classed as inedible. The machine-shelled nuts arrive in Europe in a better condition and command a higher price, being used for the production of edible oil. But the machines now in use for decorticating the nuts are not perfectly satisfactory as the breakage of kernels is considerable, and the activities of the department were directed towards evolving a machine capable of shelling dry nuts with a minimum amount of breakage. Experiments made at the Leather Trades School pointed to the bark of *Anogeissus latifolia* as an easily worked substitute for Avaram and Konam barks and its use was largely taken up by the more advanced and enlightened tanners. Tan liquors of high strength were produced in the school and these were utilized in the manufacture of leather belting on western lines. The manufacture of chrome uppers of different shades and qualities was carried out by means of coal tar colouring obtained from Allahabad and the results were highly satisfactory. The Leather Chemist was engaged on the analysis of tan stuffs and studied the tanning contents of 'wattle' of different ranges on the basis of age and growth. In the paragraph on 'Agricultural Engineering' reference has already been made to the poor progress achieved in the erection of agricultural machinery. The continued rise in the price of machinery and the high cost of liquid fuel have led to a marked decline in the popularity of the oil engine. The power problem in this Presidency will therefore probably resolve itself into a judicious application of suction gas plants using waste products, such as jungle wood, rice husks and groundnut shells, combined with the erection of electric generators in central stations. The activities of the department in respect to hand-loom weaving were, as in preceding years, confined to two peripatetic weaving parties. Party No. I worked in North Arcot and in the Ceded districts. In the former it introduced a number of fly-shuttle slays, a jacquard, and looms for weaving tape, silk ribbon and sashes. In addition it held demonstrations of dobbies in twenty-three villages and sold a number of them to the weavers for use in border-weaving, a process which had previously been carried on by more laborious methods. In the Ceded districts the party arranged for the manufacture of army blankets among the cumbli weavers. These operations were hampered by the prevalence of influenza, but about 1,500 blankets were manufactured in Beluguppa in the Anantapur district in less than two months. Weaving party No. II operated in Peddāpuram and Berhampur. Its activities in the first-named locality consisted in the demonstration of jacquards, warping mills, lattice dobbies and twisting machines. One machine of each kind was introduced besides fly-shuttle slays and accessories. In the Ganjām district also it undertook similar demonstration work and introduced similar appliances besides a large quantity of accessories. During the year experiments in manufacture were confined to three main heads—pencils, glue and soap. The pencil factory was handed over to a private syndicate on the 1st November 1918. During the period of Government management the net profits amounted to Rs. 14,000. With up-to-date machinery, a good lay-out and business management, there can be no question but that this new venture will become a considerable commercial success. At the request of the Indian Munitions Board successful experiments were undertaken in the manufacture of glue which was in great demand for use in the construction of aeroplanes. In spite of adverse conditions, such as the prevalence

Treatment of vegetable oils

Manufacture of leather

Mechanical engineering

Hand-loom weaving

INDUSTRIAL EXPERIMENTS

The Pencil factory

Glue

of influenza and the high price of raw materials, the Government Soap Works again accomplished another year's successful work. The total output of soap was 400 tons as against 227 tons in the previous year and the net profits amounted to about half a lakh. The absence of a properly equipped factory has, however, hampered the work in various directions, such as the recovery of glycerine and of potash, fixation of perfumes, fat splitting, colouring and causticising of soda ash. The Government Soap Works

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SEA-BORNE TRADE (1918–19)

[*Review of the Sea-Borne Trade of the Madras Presidency for the year 1918–19; Annual Volume of the Sea-Borne Trade and Navigation of the Madras Presidency; Statistics of British India, Vol. I, Commercial Statistics—Foreign Trade and Shipping; Review of the Trade of India. Accounts relating to the Sea-Borne Trade of British India. Annual Statement of the foreign Sea-Borne Trade and Navigation of British India, 2 Vols.; Annual Statement of the Coasting Trade and Navigation of British India*]

General summary

163. The total value of the sea-borne trade of the Presidency was Rs. 5,564 lakhs, showing an increase of Rs. 732 lakhs, or 15 per cent, as compared with that of the preceding year, and of Rs. 419 lakhs, or 8 per cent, as compared with the average for the five years ending 1915–16. The effect of the war on all foreign trade continued to be felt during the first seven months of the year. With the cessation of hostilities and the partial relaxation of restrictions, trade, especially exports, began to show considerable improvement. Foreign trade, including Government transactions, improved by Rs. 255 lakhs, or 7 per cent, to Rs. 3,728 lakhs, and coasting trade by Rs. 477 lakhs, or 35 per cent, to Rs. 1,836 lakhs. Excluding Government transactions foreign trade improved by 24 per cent and coasting trade by 37 per cent. Under foreign trade, imports of private merchandise receded from Rs. 1,220·11 lakhs to Rs. 1,176·94 lakhs, or by 3·5 per cent. Exports improved from Rs. 1,694 lakhs to Rs. 2,424·11 lakhs, or by 43 per cent. Under coasting trade, imports of private merchandise improved from Rs. 613·98 lakhs to Rs. 952·06 lakhs, or by 55 per cent, and exports rose from Rs. 706·80 lakhs to Rs. 858·06 lakhs, or by 21 per cent. The excess of exports over imports was Rs. 1,120 lakhs as against Rs. 796 lakhs in the previous year. Balance of trade

Customs revenue

164. The total gross customs revenue was Rs. 95·48 lakhs, a decrease of Rs. 10·46 lakhs, or 10 per cent. The amount of import duty realized fell from Rs. 94·95 lakhs to Rs. 88·68 lakhs, or by 7 per cent. There was a considerable decrease in the exports of rice to foreign ports and consequently less export duty was realized, the deficit being Rs. 4·19 lakhs, or 38 per cent.

Foreign imports

165. The total value of foreign imports under food, drink and tobacco increased from Rs. 215·51 lakhs to Rs. 246·48 lakhs. The total imports of liquors showed a decrease of 26 per cent in gallonage and 10 per cent in value. The most noticeable shrinkage was under malt liquors, the quantity of which was less by 35 per cent. Trade in ale and beer in bulk practically disappeared, while the imports in bottles dropped from 89,727 gallons to 71,943 gallons, but the trade in Japanese bottled beer made further expansion from 31,057 gallons to 40,820 gallons. Under spirits, the imports were reduced by 14 per cent in quantity and 9 per cent in value. The reduction occurred under all foreign spirits excepting 'other sorts' of spirits which improved by 12,271 gallons, or 65 per cent, by reason of larger receipts of Colombo arrack, the imports of which rose from 4,823 gallons to 19,805 gallons. Imports of wines declined by 28 per cent in gallonage, shrinkage being most marked in the case of port wine. The total imports under provisions and oilman's stores showed a slight improvement from Rs. 21·51 lakhs to Rs. 21·95 lakhs. Farinaceous

FOOD, DRINK AND TOBACCO

Liquors

Provisions and oilman's stores

and patent foods increased in value, but biscuits and cakes declined. Condensed milk fell from Rs. 3·19 lakhs to Rs. 1·96 lakhs. Imports of spices improved from Rs. 53·02 lakhs to Rs. 62·15 lakhs. Betelnuts, which as usual formed the bulk of the imports, rose from Rs. 50·39 lakhs to Rs. 59·43 lakhs. Imports of pepper further declined from 5,398 cwt. to 1,801 cwt.

Spices

Imports of refined sugar increased by 29 per cent in quantity and 14 per cent in value. There were no imports of unrefined sugar or molasses as large stocks of local jaggery were available for distillery purposes.

Sugar

Imports of tobacco rose by 53 per cent in volume and 67 per cent in value. Imports of unmanufactured tobacco amounted to 189,222 lb. against 151,525 lb. in the previous year. Indian manufactured cigars being in increasing demand, large quantities were exported for the troops in Mesopotamia, Egypt and East Africa. Imports of cigarettes improved from 192,951 lb. to 364,865 lb. in volume and from Rs. 7·52 lakhs to Rs. 14·16 lakhs in value.

Tobacco

RAW MATERIALS AND PRODUCE AND ARTICLES MAINLY UNMANUFACTURED

The total value of raw materials and unmanufactured articles declined from Rs. 106·63 lakhs to Rs. 63·18 lakhs.

Oils

Imports of foreign mineral oils have been greatly affected by war conditions. Supplies from the large oil fields of Russia and Roumania have not been available, and oil has been in great demand for the navies of the Allies whose needs all available tankers have been employed to supply. Total imports in consequence were reduced by 50 per cent in quantity and 67 per cent in value. There was also a fall in the imports of fuel oils, while those of foreign kerosene oil decreased by 76 per cent both in quantity and value, a deficit which was partly made good by larger arrivals of Burma oil coastwise. Imports of foreign lubricating oils declined owing to smaller receipts from the United States of America, and imports from Burma also dropped. There were no imports of foreign petrol, and supplies from Burma were increased to meet Bombay's requirements. Since February 1918 petrol has been imported in bulk from Burma into Madras, and from the Madras storage tanks supplies have been railed to Bombay.

Seeds

The total value of imports of seeds fell, by nearly 50 per cent, to Rs. 21·42 lakhs. Copra or coconut kernel from Ceylon formed the chief item under this head.

Textile materials

Imports of raw silk from China showed a further improvement.

Wood and timber

Imports of teakwood from Siam declined from Rs. 1·44 lakhs to Rs. 0·18 lakh. Of other timber, Siam supplied to the value of Rs. 0·89 lakh and Ceylon Rs. 0·80 lakh against Rs. 1·23 lakhs and Rs. 1·22 lakhs in 1917–18.

MANUFACTURES

The total value of imports of manufactured articles declined from Rs. 842·08 lakhs to Rs. 825 lakhs. The fall was chiefly due to further reduction in the imports of gold and silver thread from France.

Apparel

Imports of carriages and carts decreased from Rs. 0·84 lakh to Rs. 0·70 lakh. Motor vehicles and accessories further decreased from Rs. 5·54 lakhs, to Rs. 2·77 lakhs, while cycles and accessories declined from Rs. 5·03 lakhs to Rs. 2·90 lakhs.

Carriages including cycles and motor-cars

Chemicals (other than chemical manures) showed a contraction by 10 per cent. Imports of soda compounds receded, while sodium carbonate (soda ash and soda crystals) showed some improvement. Imports of sulphur declined from Rs. 1·82 lakhs to Rs. 0·14 lakh, while there was a slight improvement under drugs and medicines. Imports of camphor fell by over Rs. 1 lakh owing to smaller receipts from Japan. There was a slight rise in the imports of proprietary and patent medicines.

Chemicals, drugs and medicines

Clocks and watches improved from Rs. 0·67 lakh to Rs. 3·25 lakhs as a result of the importation of watches by Swiss travellers who are now bringing stocks and depositing them with agents in the principal cities. Cutlery showed a slight contraction, while hardware declined by 26 per cent.

Cutlery, hardware, implements and instruments

The total value under dyeing and tanning substances showed an improvement from Rs. 6·61 lakhs to Rs. 12 lakhs wholly brought about by larger imports of alizarine from the United Kingdom. Imports of aniline dyes further declined, the supplies coming mainly from the United Kingdom. The hand-weaving industry of this Presidency has been and is still greatly hampered by the scarcity of dyes, and the grant of £2,000,000 to the dyeing industry in the United Kingdom for expansion will, it is hoped, lead to an enhanced supply. There were no imports of synthetic

Dyes and colours

indigo. For the first time during the year a quantity of wattle bark valued at Rs. 1·52 lakhs was imported from Natal for tanning purposes on account of the high prices of local tanning materials. Glassware is one of the articles very much affected by the war. The United Kingdom's share in the total imports of the year was 52 per cent and Japan's share 27 per cent. There was a slight improvement in the imports of earthenware. The total value of machinery of all kinds including belting for machinery was almost the same as in the previous year, larger imports of belting having been counterbalanced by smaller imports of sewing and knitting machines. As in the previous year, pressure of State requirements, both of Great Britain and the Allies, has been very great and commercial work in the manufacture of iron and steel has been impossible. Tonnage also was scarce. Imports therefore declined by nearly one-eighth of the quantity imported during the pre-war period. As compared with the previous year, there was a fall of 17 per cent in quantity, but the value rose by 24 per cent. Receipts from Japan amounted to 11 per cent as against 3 per cent in the previous year. Imports of bar iron fell by 70 per cent in quantity and 55 per cent in value. Tin chiefly imported from the Straits Settlements in the shape of unwrought blocks, ingots and slabs increased by 22 per cent and the value by 50 per cent. There were larger imports of lead sheets for tea chests from Ceylon and Japan. Imports of copper improved by 71 per cent in quantity and 62 per cent in value. Under brass, yellow metal sheets (classified under copper in previous years) showed an increase of 1,066 cwt. which has been brought about by the arrival of a consignment from Japan. This is for the first time supplied by that country. There were no imports of aluminium. The total value of imports of paper and pasteboard rose by 85 per cent. Printing paper improved by 124 per cent in quantity and 175 per cent in value. Writing paper and envelopes, other kinds of paper (including paper manufactures) and pasteboard and millboard also showed an improvement. The large increase in import of printing paper was brought about by the arrival of several large orders placed in 1917 which could not come forward till 1918, the imports of the former year being 37 per cent in quantity of the previous five years' average. Imports of stationery (excluding paper) did not show much fluctuation. The total value of imports of railway plant and rolling stock increased by 13 per cent. The total value of imports of yarns and textile fabrics declined from Rs. 488·27 lakhs to Rs. 452·91 lakhs and that of cotton goods, representing 36 per cent of the total foreign imports, by 7 per cent. Imports of cotton twist and yarn declined by 17 per cent in quantity but rose by 19 per cent in value. Grey yarn improved by 5 per cent in quantity. Trade with the United Kingdom was largely supplanted by local mills and Japanese competition. The high prices of coloured yarns, for which the scarcity of dyes was largely responsible, led to very little business being put through and imports were 40 per cent in quantity less than in the previous year. The total imports of cotton piece-goods further declined by 47 per cent in quantity and 22 per cent in value and the decrease was shared by all goods, viz., grey, white and coloured. Japan sent 721,250 yards (Rs. 3·86 lakhs) of grey shirtings and drills against 46,000 yards (Rs. 0·18 lakh) in the previous year, an increase of 1,467 per cent in quantity and 2,044 per cent in value. There was a considerable decrease in the imports of white piece-goods, viz., 60 per cent in volume and 40 per cent in value. Imports of arms, ammunition and military stores improved as the result of larger receipts of explosives from the United Kingdom. Imports of cement fell from Rs. 11·56 lakhs to the small figure of Rs. 0·44 lakh. The total value of imports of miscellaneous and unclassified articles fell from Rs. 55·89 lakhs to Rs. 42·27 lakhs. The value of articles imported by post amounted to Rs. 34·56 lakhs as against Rs. 40·21 lakhs in the previous year.

Glassware and earthenware

Machinery

METALS

Iron and steel

Other metals

Paper, pasteboard and stationery

Railway plant and rolling stock

Yarns and textile fabrics

Cotton goods

Other minor items

166. The total value of exports of food, drink and tobacco declined from Rs. 644·33 lakhs to Rs. 591·44 lakhs or 8 per cent. The exports of grain and pulse further declined by 45 per cent in quantity and

Foreign exports

FOOD, DRINK AND TOBACCO

42 per cent in value. Exports of paddy (rice unhusked) which were all consigned to Ceylon declined by 61 per cent in quantity and 57 per cent in value, and those of rice, 97 per cent of which was shipped to Ceylon, fell by 44 and 42 per cent in quantity and value respectively. The season has been an abnormal one and its vagaries seriously affected the yield which was estimated to have decreased by 35 per cent. The shortage was so serious that the rice trade was placed under control and export was prohibited in October. Exports of pulse declined by 34 per cent in quantity and 15 per cent in value. Export was prohibited in February. Exports of spices had a further setback by 25 per cent in quantity and 4 per cent in value. Chillies receded by 27 per cent in quantity, but the value rose by 19 per cent. To prevent depletion of stocks export was prohibited except under licence in October. Exports of pepper fell in quantity by 22 per cent and in value by 26 per cent. Exports of ginger receded by 20 per cent in quantity and 15 per cent in value. The export of unrefined sugar which made up 83 per cent of the total exports under sugar increased by 44 per cent both in quantity and value. Of this quantity nearly 80 per cent consisted of palmyra jaggery. Shipment of refined sugar also increased nearly by 345 per cent in quantity. Practically the whole of the trade was carried on with Ceylon where there was an increased demand. In November 1917 the Food Controller in England entered into a contract with the various tea companies for the purchase of 40 per cent of the 1917 crop at rates based on the average prices for the three years 1911 to 1913. In June 1918 a further contract was entered into for an increased quantity of 66 per cent of the crop at practically the same rates. Up to the end of the year a total of 23·38 million lb. had been shipped under both the contracts. At the beginning of March the restriction in shipment of tea to the United Kingdom on private account was removed as freight became available, and 1·02 million lb. went forward during the month. Shipments to other countries were small. The coffee crop of the past season was 60 per cent larger than in the previous year, but, at the beginning of the year, the prospect of disposing of the crop in foreign markets did not look bright as all freight to the United Kingdom was required for goods of national importance. Early in the year, however, a welcome outlet was provided by a contract entered into by the Greek Government for the purchase of 2,000 tons, for which freight was provided in a Greek steamer, and the contract was followed later on by a second for 3,500 tons. Subsequently freight became available and restrictions on imports in the United Kingdom were removed in rapid stages. The total exports thus increased from 88,216 cwt. to 155,980 cwt. in quantity and from Rs. 43·43 lakhs to Rs. 83·40 lakhs in value. Exports of tobacco rose in value, by Rs. 4·51 lakhs, to Rs. 12·16 lakhs. The trade in leaf tobacco improved from Rs. 5·86 lakhs to Rs. 10·46 lakhs while shipments of cigars further declined from Rs. 1·36 lakhs to Rs. 1·29 lakhs. The demand for higher grade Indian made cigars has greatly extended particularly to Mesopotamia and East Africa, but these have been despatched for the most part via Bombay. The total value of exports of raw materials rose from Rs. 634·52 lakhs to Rs. 651 lakhs, or an increase of 2 per cent. The prohibition on the export of raw hides except light weights continued throughout the year. The export of raw skins rose by 165 per cent in weight and 190 per cent in value. The expansion was most marked in the case of shipments to the United States of America and Japan. South Indian and Bombay tanners were prohibited from tanning skins, and it was well that this outlet was found for them. Exports of metallic ores amounted to 12,990 tons valued at Rs. 4·25 lakhs, of which 12,740 tons of the value of Rs. 4·16 lakhs consisted of chromite (chrome iron ore) shipped to the United Kingdom, the figures for the previous year being 1,619 tons valued at Rs. 0·56 lakh. The increase was due to a discovery of a high grade ore in Mysore in 1918, for which there was a large demand at home for munitions. The export of oils increased from Rs. 83·70 lakhs to Rs. 92·91 lakhs. Animal oils (principally fish oils) improved from Rs. 0·40 lakh to

Grain, pulse and flour

Spices

Sugar

Tea

Coffee

Tobacco

RAW MATERIALS AND PRODUCE AND ARTICLES MAINLY UNMANUFACTURED

Hides and skins, raw

Metallic ores

Oils

Rs. 0·99 lakh, the industry on the West Coast showing rapid development. Under essential oils, lemon grass oil and sandalwood oil showed a decline. Under vegetable oils, exports of coconut oil, representing about 80 per cent of all oils, increased by 56 per cent in quantity and 50 per cent in value. Export from India was prohibited to all destinations except to the United Kingdom early in the year and large orders were placed in India by the Ministry of Food. Early in March the control was released. The exports of oil coastwise to Bombay rose by 8 per cent and of copra by 31 per cent. The 1918–19 crop of castor-seed was about 25 per cent smaller than the large crop of 1917–18 and local prices of castor oil helped by speculation rose considerably and reached figures at which the Ministry of Food was unwilling to buy and increase his large stocks in England. The total shipments, therefore, fell from 920,758 gallons to 559,881 gallons practically the whole of which went to the United Kingdom. The poor crop of groundnuts greatly reduced the outturn of groundnut oil which was in great requirement for local consumption and for which in the latter half of the year better prices were obtainable locally than were offered abroad. Shipments, therefore, fell from 626,242 gallons to 269,366 gallons in quantity and from Rs. 10·87 lakhs to Rs. 4·91 lakhs in value. Exports of castor-seed declined from Seeds
14,316 tons to 11,024 tons in quantity, while the value rose from Rs. 26·52 lakhs to Rs. 32·90 lakhs. The demand for these seeds in England for the Air Board continued up to October 1918 and exports then fell off as no fresh contracts were made thereafter. There was considerable contraction in the export of groundnuts which fell by 87 per cent in quantity and 86 per cent in value. There were no shipments to the United Kingdom and France as these countries were drawing their supplies from Senegal, where the entire African crop had been bought up by the French Government. There was also no tonnage offering to Marseilles which usually takes the greater portion of the Coromandel crop. Exports coastwise amounted to 15,176 tons against 51,198 tons. The total quantity, both foreign and coasting, shipped at the port of Madras was 18,841 tons only compared with 100,446 tons in 1917–18, a decrease of 81 per cent. Practically there were no shipments of copra to foreign countries during the year. Exports coastwise amounted to 315,739 cwt. valued at Rs. 54·17 lakhs against 235,857 cwt. valued at Rs. 36·72 lakhs. The total value of textile Textile
materials declined from Rs. 204·57 lakhs to Rs. 128·22 lakhs. Exports of materials
raw cotton showed a further decline of 65 per cent in volume and 45 per cent in value. The decrease is attributed chiefly to want of tonnage. Shipments to all countries, except Ceylon, China and Indo-China declined. The decrease was most marked in the case of shipments to Italy, Japan and the United Kingdom which fell by 97, 67 and 77 per cent respectively. Exports of raw rubber improved by nearly 70 per cent both Rubber
in quantity and value. The total value of exports of manufactured MANUFACTURES
articles increased from Rs. 328·28 lakhs to Rs. 1,078·48 lakhs. Exports of
dyeing and tanning substances improved from Rs. 15·33 lakhs to Rs. 37·74 Dyes and
lakhs. Exports of indigo slightly recovered and amounted to 512 tons colours
valued at Rs. 32·25 lakhs against 170 tons valued at Rs. 11·55 lakhs in 1917–18, an increase of nearly 200 per cent. Both the price and demand at home were still poor, but there were heavy purchases made by Japan owing to her expansion of industrial work and to the difficulty in obtaining synthetic dyes. Shipments to Japan improved from Rs. 6·05 lakhs to Rs. 23·82 lakhs, while those to the United Kingdom declined from Rs. 4·36 lakhs to Rs. 3·33 lakhs. Egypt absorbed to the value of Rs. 3·21 lakhs, while she took none in the previous year. The total exports of Hides and
tanned hides and skins, both private and Government, increased by 50 skins, tanned
per cent in weight and 55 per cent in value. Owing to the prohibition or dressed,
against the tanning of skins, all tanners had no other alternative than to and leather
turn their attention to the tanning of hides which were urgently required by Government for war purposes. Hence the increased output and subsequent export in 1918–19. The shipments were almost entirely consigned to the United Kingdom. Exports of tanned skins also improved

by 63 per cent in weight and by 50 per cent in value. Exports of cotton twist and yarn declined by 25 per cent, but the value rose by one per cent.

Yarns and textile fabrics

Exports of cotton piece-goods, of which nearly 97 per cent were coloured goods, improved by seven per cent in volume and 35 per cent in value. The export trade in Madras handkerchiefs made on handlooms, which had dropped to Rs. 1·85 lakhs in 1917–18, improved to Rs. 5·02 lakhs, of which practically the whole went to the United Kingdom. Exports

Coir manufactures

of coir manufactures, consisting of coir yarn and matting, amounted to Rs. 28·46 lakhs against Rs. 43·50 lakhs in 1917–18.

Oil-cakes

Oil-cakes to the value of Rs. 62·48 lakhs were exported against Rs. 49·29 lakhs.

Re-exports

The total value of re-exports amounted to Rs. 40·30 lakhs against Rs. 25·13 lakhs in the previous year.

Government transactions

167. The total value of Government stores imported and exported amounted to Rs. 127·15 lakhs and Rs. 0·35 lakh compared with Rs. 118·54 lakhs and Rs. 440·74 lakhs respectively in the previous year. The increase under imports was brought about by larger imports of woollen goods partly counterbalanced by smaller imports of cotton piece-goods, apparel, drugs and medicines, flax manufactures and chemicals. The small figure under exports is explained by the fact that shipments of tanned hides and calf skins under Government control are now recorded under private trade instead of under Government stores as in 1917–18. Also there were no shipments of tea and railway plant and rolling stock during the year.

Shipping

168. The total number of vessels that entered and cleared declined from 3,793 to 3,062 and their tonnage from 1·75 million tons to 1·50 million tons. The average tonnage per vessel improved from 461 to 491, but this figure falls far short of the average tonnage of 1913–14, viz., 1,329. Excluding the ferry steamers plying daily between Dhanushkodi and Talaimannar, the average tonnage of British vessels entering and clearing was 1,674 and that of foreign vessels 2,605. Of the seven vessels which entered under foreign colours there were three under Norwegian, and one each under Dutch, Swedish, Chinese and Japanese. British vessels accounted for 88 per cent of the whole tonnage and British-Indian and native crafts for eight per cent. The tonnage of foreign vessels declined from five to four per cent. The number of native craft engaged in foreign trade declined from 1,034 to 924, but their tonnage rose from 61,947 to 75,981.

General effects of the war

169. As a result of war conditions trade with the British Empire reached the record aggregate of Rs. 3,069·42 lakhs and her share of the total foreign trade increased to 85 per cent; in 1917–18 the share was 81 per cent and in the pre-war period 63 per cent. The increase was entirely in the export trade which expanded by 54 per cent, while the value of imports declined by three per cent, giving a net increase in trade of 30 per cent. The trade with other countries declined by three per cent.

Trade according to countries

170. The trade with the United Kingdom represented 53 per cent of the total trade compared with 40 per cent in 1917–18 and expanded by Rs. 751·53 lakhs or by 64 per cent. If the tanned hides and skins shipped under Government control in 1917–18 are also included in the figures of private trade, the total trade would be increased by 21 per cent. The trade with the British Empire, representing 85 per cent of the aggregate trade of the Presidency, expanded by Rs. 704·13 lakhs or 30 per cent. The trade with the Continent of Europe showed a decline of Rs. 22·87 lakhs or 22 per cent and the decrease occurred mainly under France and Italy although there were increases in the trade with Norway and Greece. Smaller trade with Japan, Java and Sumatra set off by larger transactions with China, Persia and Indo-China accounts for a decrease of Rs. 17·17 lakhs in the total trade with the Asiatic ports. The trade with Africa, excluding Egypt, declined by Rs. 0·52 lakh and that with America, which was practically confined to the United States improved by Rs. 23·36 lakhs or by 14 per cent.

Coasting trade

171. The total value of the coasting trade, excluding Government transactions, improved by Rs. 489·33 lakhs or 37 per cent. Imports of private merchandise expanded by Rs. 338·08 lakhs or 55 per cent owing to

larger arrivals of grain and pulse, mineral oils, cotton twist and yarn and piece-goods and sugar. Exports rose by Rs. 151·26 lakhs or 21 per cent in consequence of large shipments of raw cotton, copra, coconut oil, pepper and timber.

Ports

172. The relative importance of the trade of the outports remained much the same as in the previous year. Cuddalore improved its position from the ninth to eighth. All the ports except Dhanushkodi, Cocanada, Kulasekarapatnam, Porto Novo and Masulipatam showed increased trade. The value of the sea-borne trade on private account at the port of Madras represented 48 per cent of the trade of the whole Presidency compared with 42 per cent in the previous year and 45 per cent in 1916-17.

Miscellaneous

173. The total revenue receipts for the Presidency fell from Rs. 115·03 lakhs to Rs. 106·70 lakhs or by seven per cent. The total disbursements on account of customs for the whole Presidency amounted to Rs. 6·97 lakhs compared with Rs. 6·65 lakhs in 1917–18. The number of cases dealt with under the Sea Customs Act during the year was 1,177 against 936 in the previous year. Penalties realized Rs. 0·28 lakh against Rs. 0·19 lakh in 1917–18. Five hundred and fourteen cases occurred at Madras and 663 at the outports. In three cases heavy penalties were imposed for infringement of the prohibition of importation of old newspapers.

PUBLIC WORKS

GENERAL (1918–19)

[*Administration Report of the Public Works Department, Madras Presidency, for the year* 1918–19]

Administrative changes

174. There was no alteration in the permanent strength of the Engineer establishment. The strength of the Upper Subordinate establishment was reduced by eight in consequence of the separation of the establishment of the Agricultural department from that of the Public Works department, and by another two in consequence of the conversion of two posts of upper subordinates in the Consulting Architect's section into those of draftsmen. The services of 11 more officers and upper subordinates of the department were placed at the disposal of the Army department for military duty during the year, thus bringing the total number of officers lent since the beginning of the war to 60. Six officers and subordinates returned from military duty and one officer was made a member of the Military Division of the Most Excellent Order of the British Empire for distinguished service in connexion with military operations in Mesopotamia. Owing to semi-famine conditions prevailing in the Upper Gōdāvari Agency an additional subdivision was formed in the I Circle with headquarters at Kunavaram to cope with the increased operations of the department. The Vijhesvaram Head works with the lock establishment hitherto in charge of the Gōdāvari Western division of the II Circle were transferred to the Gōdāvari Head works division and the ghat road from Jannamguda to Anantagiri, a distance of 12 miles, was transferred to the Koraput division from the Vizagapatam District Board. In the III Circle two temporary subdivisions were created during the year. In the V Circle the Superintendent of the Government Gardens in Madras was placed under the control of the Executive Engineer, South Presidency division, and Government Houses at Madras and Guindy were constituted into a subdivision. In the VI Circle a temporary subdivision, known as the Cauvery River Conservancy subdivision, with headquarters at Karur, was formed in the Trichinopoly division in place of the Kārūr subdivision. In the VII Circle the subdivisional charges of the Tank Restoration Scheme division were reconstituted and there were also other minor changes in certain section charges of the Vennār and South Arcot divisions.

Chief Engineer's office

Technical section

175. Seventy-five estimates of the aggregate value of Rs. 86·56 lakhs were scrutinized during the year. Twenty of these totalling Rs. 13·45 lakhs related to water-supply, eight aggregating Rs. 41·67 lakhs to drainage and 34 totalling Rs. 28·57 lakhs to roads and bridges. The balance of Rs. 2·87 lakhs related to 13 miscellaneous schemes. The more important of these schemes were Rāmēsvaram water-supply scheme, Rāmnād district (revised estimate Rs. 2·00 lakhs), full power test Tuticorin water-supply scheme (Rs. 2·63 lakhs), Chingleput water-supply scheme (revised estimate Rs. 2·05 lakhs), Madura drainage scheme (consolidated revised estimate Rs. 37·85 lakhs), bridge over the Jallerugedda, Vizagapatam district (revised estimate Rs. 5·75 lakhs), widening the Government House bridge, Madras, revised estimate Rs. 4·50 lakhs and cart-road from Komattiyur to Patrakad on the Javadi hills, North Arcot district (Rs. 1·34 lakhs).

Consulting Architect's section

The Consulting Architect prepared about 430 drawings for various buildings with specifications and schedules of quantities for most of them. His time was mostly taken up with medical and educational buildings, with the General Hospital scheme as the principal work of the year. The preliminary drawings for this latter work, which is intended to provide accommodation also for the Medical College, were completed, approved by the local Hospital Reorganization Committee, and submitted to the Government of India together with an approximate estimate of cost amounting to Rs. 74·32 lakhs. One hundred and thirty-five estimates and designs, with an aggregate value of Rs. 72·25 lakhs, were scrutinized during the year. Of these, 14 works were for buildings estimated to cost over a lakh each, 24 for buildings costing from half a lakh to one lakh and 97 for buildings costing less than half a lakh.

Electrical schemes and works

A new electrical division was formed during the latter part of the year for the Government Electrical Works in Madras city and Guindy, the charge of which was transferred from the Superintending Engineer, V Circle, to the Electrical Engineer. A long discussed scheme to obtain from the waterfall stream an electric supply to the Ootacamund Municipality was revived during the year. The manufacturing plant of the Government Cinchona factory at Naduvattam on the Nilgiris was modernized throughout and a scheme to supply it with electric power from a neighbouring stream was under consideration. The Electrical Engineer to Government scrutinized during the year 129 estimates of the aggregate value of Rs. 2·30 lakhs. The most important of these relates to the provision of fans and lights to the Teachers' College and quarters, Saidapet. The revised estimate, amounting to Rs. 0·73 lakh, for providing electric lights and fans to the new Engineering College was sanctioned about the end of the year and arrangements were made to commence the installation. The number of installations under Public Works department's maintenance throughout the Presidency was 95 as against 69 in the previous year, and their capital cost together with that of the plant maintained was Rs. 11·70 lakhs. The amount spent on their maintenance, apart from the actual consumption charges, was Rs. 0·75 lakh as against Rs. 0·55 lakh in the previous year. The increased cost was mainly due to the high prices of materials consequent on the war and to a less extent to the increased cost of labour and establishment. The total number of fans working was 2,620, lights 8,274 and motors other than fans 45.

CIVIL WORKS (1918-19)

Works in progress

Buildings

176. The total expenditure for the year on civil works, including expenditure from contributions, minor works and repairs, was Rs. 49·80 lakhs as against Rs. 50·94 lakhs in the previous year. The more important of the works are the New Engineering College, Guindy, on which very good progress was made, the year's expenditure being over Rs. 2 lakhs, which brings the total outlay to Rs. 9·77 lakhs against the estimated cost of Rs. 15·65 lakhs; the Rāyapuram Hospital on which the outlay

was Rs. 1·25 lakhs, the total expenditure being 6·18 lakhs as against the estimated cost of Rs. 10·84 lakhs; and the B^1 and B^2 police lines at Madras which were nearly completed, the total expenditure thereon amounting to Rs. 2·85 lakhs, of which Rs. 0·64 lakh represents the year's outlay. The progress made in the construction of the Civil Hospital at Vizagapatam was very satisfactory in spite of restrictions on railway traffic, labour scarcity and difficulty in getting materials. The expenditure during the year was Rs. 1·42 lakhs, bringing the total outlay to Rs. 2·05 lakhs against the estimated cost of Rs. 4·98 lakhs. Some progress was made during the year on the work of improving the Customs accommodation at Cochin, the total expenditure on which inclusive of the year's outlay has already exceeded the estimate by over Rs. 3,500. An expenditure of nearly Rs. 34,000 was incurred on the Kalingiyā Ghat road, bringing up the total outlay on the work to Rs. 1·74 lakhs as against an estimated cost of Rs. 1·86 lakhs. The work of forming a road between Kunavaram and Ippur (estimate Rs. 1·08 lakhs) was started in anticipation of sanction with a view to providing work for labourers under semi-famine conditions prevailing in the Gōdāvari Agency, and an expenditure of Rs. 10,000 was incurred. The construction of the girder bridges over the Aliyar river at Yakkara was completed during the year, as also that of the bridge with Warren girders and a reinforced concrete floor across the Amarāvati at Chinnadhārāpuram. The Berhampūr water-supply scheme was completed during the year and handed over to the municipality, the total outlay on the work being Rs. 3·91 lakhs. The Masulipatam water-supply scheme was practically completed by the end of October 1918, the total expenditure thereon being Rs. 6·40 lakhs. Water was supplied to the town from the 1st November, the plant being worked by the Public Works department till the end of March 1919, when it was handed over to the municipality. The Ellore water-supply works were almost completed, with the exception of the compound wall, and water was supplied to the town from the 5th March 1919. The outlay to the end of the year was Rs. 5·16 lakhs. The Erode water-supply scheme was nearing completion at the close of the year, the total outlay being Rs. 3·25 lakhs. Improvements to the existing water-supply at Tirupati were completed, the total expenditure amounting to Rs. 2·22 lakhs. Some progress was made on the Madura drainage scheme, the year's outlay thereon being Rs. 1·24 lakhs, the total expenditure hitherto incurred amounting to Rs. 13·62 lakhs. Other major works of water-supply and drainage were also in progress during the year.

Imperial civil works

Communications

Water-supply and drainage

177. The value of work done during the year under all heads in the Dowlaishwaram workshops amounted to Rs. 1·67 lakhs as against Rs. 1·37 lakhs in the previous year. There were decreases in the value of work done for other departments including Port and Marine departments and for private parties including municipalities; but that done for the Public Works department rose by over Rs. 33,000, the increase being mainly due to the construction of ten wooden deep boats. In the Bezwada workshops the value of work done was Rs. 0·77 lakh as against Rs. 0·74 lakh in the previous year. The figure is however much below the average for the past three years and the fall was due to the prevailing war conditions. Owing to the restricted output there was no necessity to run the 21 horsepower oil engine obtained from the Guntūr division in 1916–17 and it was transferred to the Public Works Workshops, Madras, for war purposes. There was a fall by Rs. 0·52 lakh to Rs. 2·54 lakhs in the value of outturn at the Presidency Workshops, which was partly due to the preference given to munitions work to the detriment of other classes of work and partly to the latter having been stopped to some extent for want of materials. Of the more important items of manufacture during the year, mention may be made of the supply of 126,000 curry combs, 100,000 bolts with nuts and 1,000 pack saddles to the agent for munitions at a total cost of nearly Rs. ·80 lakh and the supply of 100,000 horse shoes to the Ordnance Officer, Madras, at a cost of Rs. 26,000 and of 500 drums cable to the Superintendent, Madras Arsenal, at a cost of Rs. 7,500.

Workshops

RAILWAYS (1918-19)

[*Administration report of the Public Works Department, Madras Presidency, for the year* 1918-19; *Statistics of British India, Vol. I, Commercial Statistics—Railways*]

Development

178. There was no addition to, or decrease in, the open mileage of railways in this Presidency during the year. The total mileage of the railway systems controlled by the Railway Board was 3,825·20 miles and that of District Board railways, which are subject to the general control of this Government, was 214·14 miles. No new lines were constructed during the year. War conditions continued to stand in the way of the Tirutturaippūndi-Vēdāranniyam Railway being opened for traffic, and the construction of the Tinnevelly-Tiruchendūr Railway could not be resumed for the same reason. The Guntūr-Tenali line dismantled in the previous year was not restored. The survey of the Shoranūr-Nīlambūr-Manantoddy line was in progress. No fresh surveys were undertaken during the year. The report of the officer of the Railway Board in charge of the Mysore and West Coast Railway surveys on the Hassan-Mangalore Railway project was still under the consideration of the Railway Board. The forty-three new District Board and other lines referred to in the previous year's report were still under consideration.

Accidents

179. There was no appreciable decrease in the number of accidents which occurred during the year, but none of them was so serious as to call for notice.

Miscellaneous

180. The subject of railway development in the Madras Presidency has been rapidly assuming very large proportions and is daily offering problems of growing complexity. The necessity for the services of an expert in railway matters, who would be able to view questions of railway development in all their aspects, having been much felt. The Senior Government Inspector of Railways Circle No. 7, Madras, was, with the sanction of the Secretary of State, appointed Secretary for Railways in addition to his duties. With such an expert at the head, the interests of district boards and the community as a whole, who look to the Government for guidance and protection, would be safeguarded and schemes could be put forward in a more thorough shape than has been hitherto possible. The remarks of the railway administrations and district boards on the revised form of model agreement were received during the year and were communicated to the Railway Board with the views of the Government of Madras. Certain suggestions which had been made direct by the South Indian Railway to the Railway Board were referred to the Madras Government and were under consideration. The restrictions in regard to ordinary train service and the movement of pilgrim traffic continued in force during the year. The report submitted to the Railway Board during the year by the Senior Government Inspector of Railways Circle No. 7, Madras, on the food arrangements for Indian passengers on railway platforms was forwarded to the railway administrations concerned for information and consideration of the suggestions contained therein.

TRAMWAYS (1918-19)

181. The route mileage operated upon by the Madras Electric Tramway system in Madras city remained the same as in the previous year and the plant at the power station continued to be used only as a standby, current being obtained as usual from the Madras Electric Supply Corporation, Limited. There was an addition to the rolling stock of four bogie cars and two trailers constructed by the Tramway Company during the year. The average daily service decreased from 69 to 65 cars and the car mileage fell in consequence from 1,581,430 miles to 1,400,278 miles. The passenger traffic has, on the other hand, been steadily increasing in volume year after year, the number carried during 1918-19 rising, by 84,254, to 22,843,349. The net balance on the year's working again showed a slight increase over that of the previous year.

CANALS (1918-19)

182. Navigation was carried on as usual on the Chilka lake canal, the Dummagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vēdāranniyam canals. Excluding the Chilka lake canal and the West Coast canals, for which figures are not available, the total receipts amounted to Rs. 2·86 lakhs, or Rs. 0·17 lakh more than in the previous year. The increase occurred chiefly under the Gōdāvari and the Buckingham canals and was due to the higher revenue realized from licence and raft fees as the restrictions on railway traffic on account of war conditions continued during the year. These restrictions also resulted in an increase in the number of passengers and in the ton-mileage and value of goods carried.

IRRIGATION (1918-19)

[*Statistics of British India, Vol. I, Commercial Statistics—Irrigation*]

Gross expenditure and revenue

183. The expenditure incurred on irrigation works rose, by Rs. 1·08 lakhs, to Rs. 80·04 lakhs, but the revenue derived therefrom fell from Rs. 275·26 lakhs to Rs. 251·50 lakhs. The area charged as irrigated was 6,837,673 acres, or 521,156 acres less than in 1917-18.

Class I, Major works

Protective works

184. As in the previous year there were four works sanctioned under "Major Protective works." Of these the Rushikulya system and the Venkatapuram tank were in operation, the Bhavanasi tank project was completed during the year and the Mopad reservoir project was still under construction. The capital outlay was Rs. 2·14 lakhs (direct and indirect) as against Rs. 2·66 lakhs in the previous year, and the bulk of this expenditure was incurred on the Mopad reservoir project. The areas irrigated under the Rushikulya system rose, by 737 acres, to 105,849 acres under first crop and, by 242 acres, to 1,996 acres under second crop. The gross revenue, including old irrigation revenue, fell from Rs. 2·60 lakhs to Rs. 2·44 lakhs, while the working expenses rose from Rs. 0·66 lakh to Rs. 0·75 lakh. The net revenue deducting interest charges showed a deficit of Rs. 1·41 lakhs against Rs. 1·08 lakhs in the previous year.

Productive works

The capital outlay on productive works (direct and indirect) increased from Rs. 6·55 lakhs to Rs. 7·83 lakhs and was incurred mainly on the Gōdāvari and the Kistna delta systems, the Kurnool-Cuddapah canal and the Toludur project, the last of which continued to be the only work of this class under construction. In the Gōdāvari delta system improvements to the Yenamadurru drain, excavation of a new approach channel to the Bobberlanka lock, protection with steel sheet piles of the lower margin of the impervious apron below the Dowlaishwaram head sluice and improvements to the mouth of the Tuliabhaga drain were completed, while the remodelling of the Chinchinada channel, improvements to the Kovur-Manjair junction canal, construction of a lock and regulator on the Kakaraparru canal and the remodelling of the Tossipudi north side channel were in progress. In the Kistna delta system the improvements to the Bhattiprole drain were completed, while the remodelling of the Donepudi block was in progress. In the Kurnool-Cuddapah canal the Chepad project was the only work of importance in progress. The total area charged as irrigated fell, by 58,344 acres, to 2,944,606 acres under first crop, but under second crop it rose, by 9,497 acres, to 533,378 acres.

Revenue

The gross revenue and working expenses, inclusive of old irrigation revenue and old maintenance charges, amounted to Rs. 158·00 lakhs and Rs. 29·31 lakhs, respectively, against Rs. 160·67 lakhs and Rs. 34·12 lakhs in the previous year. The net revenue due to improvements was Rs. 86·21 lakhs against Rs. 86·80 lakhs in the previous year, representing a return of 9·79 per cent on the capital outlay of Rs. 8·80 crores as against 9·95 per cent in 1917-18. After deducting interest charges the profit for the year was Rs. 57·51 lakhs against Rs. 58·41 lakhs in the previous year and accumulated profits to the end of the year amounted to Rs. 17·34 crores. Compared with the previous year the gross revenue showed a decrease of Rs. 2·67 lakhs, which

occurred chiefly under the Cauvery delta system owing to the failure of the monsoon. There was also a fall of Rs. 4·80 lakhs under "Working expenses." The decrease was due chiefly to the change introduced by the Government of India in the systems of distributing the charges for Public Works establishment among the several Public Works major heads. The remissions granted under Protective and Productive works were Rs. 4,099 and Rs. 6,55,111, respectively, against Rs. 1,215 and Rs. 1,92,580 in the previous year. They were mostly granted in the Kistna and the Cauvery delta systems.

Expenditure under revenue account

Remissions

Class II, Minor works and navigation

185. The capital outlay (direct and indirect) on minor works and navigation was Rs. 1·22 lakhs, which was chiefly incurred on the Kaniyampālaiyam anicut project in the Coimbatore district and the Panjapatti project in the Trichinopoly district. The area charged as irrigated fell, by 14,115 acres, to 257,944 acres under first crop and, by 33,598 acres, to 64,839 acres under second crop. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 13·22 lakhs and Rs. 4·86 lakhs, respectively, against Rs. 15·17 lakhs and Rs. 4·43 lakhs in the previous year. The net revenue due to improvements fell by Rs. 2·34 lakhs. The remissions rose from Rs. 6,141 to Rs. 1,44,639 and these were granted chiefly under the Pālār anicut system.

Class III works

186. The outlay on Class III works, including that incurred by Civil officers and accounted for by the Civil department, was Rs. 29·19 lakhs as against Rs. 28·49 lakhs in the previous year. The area charged as irrigated fell from 3,354,636 acres to 2,929,061 acres and the revenue derived inclusive of the amount collected in the Public Works department was Rs. 76·92 lakhs against Rs. 95·77 lakhs in the previous year. A sum of Rs. 16·80 lakhs was remitted as against Rs. 3·25 lakhs in the previous year. An area of about 103,750 square miles under all works in the Presidency had to be investigated under the Tank Restoration Scheme. An area of 83,612 square miles of minor basins had been entered upon by the beginning of the year under review, of which 78,015 square miles had been investigated. During the year an area of 1,207 square miles were entered upon and 965 square miles investigated. Works were executed for 72,562 square miles in the area completely investigated, were in progress for 5,574 square miles, and were not commenced in the balance of 844 square miles. Estimates amounting to Rs. 3,92,128, or Rs. 83,504 more than in the previous year, were sanctioned for Government works, the amount sanctioned under this head from the beginning of the operations up to the end of the year being Rs. 144·67 lakhs. The expenditure during the year was Rs. 4·32 lakhs or Rs. 6·18 lakhs including percentage charges.

Tank Restoration Scheme

Class IV, Agricultural works

187. The outlay incurred on Agricultural works increased from Rs. 6·70 lakhs to Rs. 8·31 lakhs, but the revenue realized fell from Rs. 1·05 lakhs to Rs. 0·92 lakh.

Investigation of projects

188. The estimate for the Cauvery reservoir project was still under the consideration of the Government of India. The Vengalapuram project in the Nellore district, the Velgode project in the Kurnool district, the improvements to the Kurnool-Cuddapah canal and the Cardamom Hills project in the Madura district were still under consideration. Plans and estimates for improvements to the Girisola channel in the Ganjām district were prepared, and investigation in connexion with improvements to the Jayamangalam channel and the Korathala Tampara was in progress. The revenue aspect of the Vamsadhāra project was still under examination by the local officers. In the Gōdāvari district the estimates for the extension of irrigation to the Coringa and Polavaram islands were still under revision. The plans and estimates for the distribution system of the Pratur pumping scheme in the Guntūr district were completed while those for resluicing the Amarāvati channels in the Coimbatore district were still under consideration. The detailed investigation of a reservoir project on the Amarāvati was approved and the establishment required for it sanctioned. The readings of gauges in connexion with the Meengarai and Malapuzha projects in the Malabar district were continued.

Small Projects

In connexion with the scheme to render the Nilambūr river navigable for the transport of forest produce, an estimate for the construction of an experimental dam in the river was under consideration. The estimate for widening the Ammapet bridge, Chidambaram drainage scheme, was held in abeyance owing to the difficulty in procuring steel work, while the improvements to the Pasumuthan odai will be taken up together with the Veeranam tank improvements, the detailed estimate for which was under revision by the local officers. Detailed estimates for straight cutting the Uppanār were prepared. The estimates for works necessary to prevent damage by floods caused by the spill of the Vellar above the Shatiatope regulator were held in abeyance owing to the difficulty in procuring steel work. The plans and estimates for improvements to the Vadavār were under the consideration of the Chief Engineer for Irrigation.

189. No exceptional floods occurred during the year, nor were there any serious breaches or accidents. **Miscellaneous**

190. The ayacut maps for the Kistna delta and the Kurnool-Cuddapah canal were nearing completion. **Ayacut maps**

CHAPTER V

REVENUE AND FINANCE (1918–19)

[*Statistics of British India, Vol. II, Financial Statistics*]

REVENUE AND FINANCE OTHER THAN MUNICIPAL

(*a*) GROSS REVENUE

Revenue and expenditure

191. The following statements give the figures during each of the past two years of the Imperial and Provincial revenue and expenditure as well as the capital expenditure on State Railways and Irrigation Works not charged to Revenue :—

Imperial and Provincial Funds—Receipts

Heads of account	Imperial		Provincial		Total	
	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19
Principal heads of revenue	RS.	RS.	RS.	RS.	RS.	RS.
I. Land Revenue	3,51,61,566	3,45,59,338	3,51,61,566	3,45,59,338	7,03,23,132	6,91,18,676
II. Opium	5,23,025	6,03,150	...	...	5,23,025	6,03,150
III. Salt	1,61,98,441	1,77,72,899	...	...	1,61,98,441	1,77,72,899
IV. Stamps	77,11,598	82,20,084	77,11,599	82,20,085	1,54,23,197	1,64,40,169
V. Excise	2,01,76,050	2,32,22,404	2,01,76,050	2,32,22,405	4,03,52,100	4,64,44,809
VII. Customs	1,15,02,941	1,08,30,800	...	...	1,15,02,941	1,08,30,800
VIII. Income-tax	43,09,220	64,92,510	38,30,349	40,24,944	81,39,569	1,05,17,454
IX. Forest	...	...	54,58,489	47,91,460	54,58,489	47,91,460
X. Registration	...	...	24,72,459	27,38,200	24,72,459	27,38,200
XI. Tributes from Indian States.	44,96,519	44,96,519	...	...	44,96,519	44,96,519
XII. Interest	7,29,761	8,15,706	4,56,476	4,90,071	11,86,237	13,05,777
Receipts by Civil Departments						
XVI-A. Law and Justice—						
A. Courts of Law	...	...	11,33,641	10,34,046	11,33,641	10,34,046
B. Jails	...	...	7,69,942	10,96,625	7,69,942	10,96,625
XVII. Police	...	...	5,40,124	5,50,520	5,40,124	5,50,520
XVIII. Ports and Pilotage	...	...	410	124	410	124
XIX. Education	...	...	3,54,894	3,79,834	3,54,894	3,79,834
XX-A. Medical	...	...	1,57,224	3,36,027	1,57,224	3,36,027
XX-B. Sanitation	...	...	15,525	45,431	15,525	45,431
XXI-A. Agriculture	...	...	1,88,771	2,49,893	1,88,771	2,49,893
XXI-B. Scientific and Miscellaneous Departments.	...	...	18,71,495	15,60,120	18,71,495	15,60,120
Miscellaneous						
XXII. Receipts in aid of Superannuation.	1,22,624	1,11,154	1,25,990	1,80,221	2,48,614	2,91,375
XXIII. Stationery and Printing ...	15,235	33,765	1,68,068	1,58,045	1,83,303	1,91,810
XXV. Miscellaneous	87,437 * 12,84,124	30,550 12,03,919	2,02,380	2,63,429	2,89,817 12,84,124	2,93,979 12,03,919
XXVI. State Railways (gross receipts).	9,33,65,391	9,68,14,746	...	...	9,33,65,391	9,68,14,746
State Railways (District working expenses).	4,94,84,106	5,43,14,275	...	...	4,94,84,106	5,43,14,275
Net Receipts	4,38,81,285	4,25,00,471	...	...	4,38,81,285	4,25,00,471
XXVIII. Subsidized Companies—Repayment of advance of interest.	1,95,391	1,271	...	...	1,95,391	1,271
Revenue from Productive Public Works						
XXIX. Irrigation—Major Works—						
Direct Receipts	1,59,537	1,68,756	1,59,537	1,68,757	3,19,074	3,37,513
XXX. Minor Works and Navigation in charge of—						
Civil Officers	...	...	24,491	22,622	24,491	22,622
Public Works Officers ...	...	...	2,92,379	2,70,000	2,92,379	2,70,000
XXXI. Civil Works in charge of—						
Civil Officers	...	...	42,156	99,061	42,156	99,061
Public Works Officers ...	12,889	4,516	4,41,425	4,20,138	4,54,314	4,24,654
Total ...	14,65,67,643	15,10,67,812	8,17,55,440	8,48,81,396	22,83,23,083	23,59,49,208
Transfers between Imperial and Provincial Revenues.	— 16,74,540	— 25,81,790	+ 16,74,540	+ 25,81,790	...	...
Grand Total ...	14,48,93,103	14,84,86,022	8,34,29,980	8,74,63,186	22,83,23,083	23,59,94,208

* Freight tax.

Imperial and Provincial Funds—Charges

Heads of account	Imperial		Provincial		Total	
	1917-18	1918-19	1917-18	1918-19	1917-18	1918-19
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.
1. Refunds and drawbacks	4,97,756	8,67,942	2,71,312	4,08,548	7,69,068	12,76,490
2. Assignments and compensations	10,05,981	9,57,633	2,77,958	3,09,168	12,83,939	12,66,801
3. Land Revenue	...	...	1,24,81,018	1,29,38,811	1,24,81,018	1,29,88,811
5. Salt	18,42,910	25,72,450	...	...	18,42,910	25,72,450
6. Stamps	2,43,846	2,41,624	2,43,845	2,41,624	4,87,691	4,83,248
7. Excise	9,02,712	10,52,824	9,02,713	10,52,824	18,05,435	21,05,648
9. Customs	4,34,351	4,49,589	...	...	4,34,351	4,49,589
10. Income-tax	34,147	44,953	34,146	44,952	68,293	89,905
11. Forest	...	...	30,20,349	31,86,472	30,20,349	31,86,472
12. Registration	...	...	13,39,696	15,09,638	13,39,696	15,09,638
13. Interest	...	...	3,49,902	3,74,983	3,49,902	3,74,983
14. Interest on other obligations	2,51,217	2,75,924	...	...	2,51,217	2,75,924
18. General administration	5,84,416	6,36,147	15,84,614	16,66,876	21,69,030	23,03,023
19. Law and Justice—						
A. Courts of Law	...	...	85,12,927	90,03,118	85,12,927	90,03,118
B. Jails	...	...	16,70,335	21,08,859	16,70,335	21,08,859
20. Police	...	...	1,17,33,361	1,21,06,276	1,17,33,361	1,21,06,276
21. Ports and Pilotage	...	...	51,371	44,124	51,371	44,124
22. Education	...	...	94,04,674	110,19,599	94,04,674	1,10,19,599
23. Ecclesiastical	3,54,978	3,50,675	...	...	3,54,978	3,50,675
24-A. Medical	...	...	21,72,444	26,86,557	21,72,444	26,86,557
24-B. Sanitation	...	...	16,42,576	15,61,103	16,42,576	15,61,103
25. Political	1,03,082	97,217	89,292	91,873	1,92,374	1,89,090
26-A. Agriculture	...	...	12,87,441	15,53,969	12,87,441	15,53,969
26-B. Scientific, etc., Departments	...	...	13,77,863	17,73,225	13,77,863	17,73,225
27. Territorial and political pensions	2,90,101	2,75,776	...	...	2,90,101	2,75,776
28. Civil furlough and absentee allowances.	6,220	21,791	...	...	6,220	21,791
29. Superannuation and retired allowances.	31,817	39,619	33,32,808	36,12,025	33,64,625	36,51,644
30. Stationery and printing	8,99,670	8,35,568	14,42,990	13,32,205	23,42,660	21,67,773
32. Miscellaneous	1,22,508	2,18,152	5,53,060	4,91,078	6,75,568	7,09,230
33. Famine relief. In charge of Civil Officers.	...	33,633	...	11,211	...	44,844
Do. P.W. Officers.	601	36,309	201	12,103	802	48,412
34. Construction of protective railways	— 299	— 286	...	...	— 299	— 286
35. Do. irrigation works	2,62,897	2,15,853	...	...	2,62,897	2,15,853
39. Guaranteed companies	...	...	...	...	...	...
40. Subsidized companies	11,072	1,732	...	...	11,072	1,732
41. Miscellaneous railway expenditure	15,026	32,796	...	...	15,026	32,796
42. Irrigation (major works)—						
Public Works Officers (Working expenses).	11,06,633	10,00,390	11,06,632	10,00,389	22,13,265	20,00,779
Public Works Officers (Interest on debt).	15,40,650	15,60,395	15,40,650	15,60,396	30,81,300	31,20,791
43. Irrigation (minor works)—						
In charge of Public Works Officers.	...	...	32,95,489	36,70,584	32,95,489	36,70,584
Do. Civil Officers	...	...	7,69,074	7,53,067	7,69,074	7,53,067
45. Civil works—						
In charge of Public Works Officers.	— 2,79,689	1,30,893	51,87,656	54,93,963	49,07,967	56,24,856
Do. Civil Officers	...	...	23,83,016	48,61,315	23,83,016	48,61,315
Total expenditure charged to Revenue	1,02,62,603	1,19,49,599	7,85,59,463	8,65,30,935	8,88,22,066	9,84,80,534
Surplus (+) or Deficit (—)	+ 13,46,30,500	+ 13,65,36,423	+ 48,70,517	+ 9,32,251	+ 13,95,01,017	+ 13,74,68,674
Grand Total	14,48,93,103	14,84,86,022	8,34,29,980	8,74,63,186	22,83,23,083	23,59,49,208
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.						
48. State Railways	— 6,88,676	— 4,38,879	...	...	— 6,88,676	— 4,38,879
49. Irrigation works	5,62,967	5,89,502	...	...	5,62,967	5,89,502
Total, Capital outlay	— 1,25,709	— 1,50,623	...	...	— 1,25,709	— 1,50,623
Grand Total (Disbursements)	1,01,36,894	1,21,00,222	7,85,59,463	8,65,30,935	8,86,96,357	9,86,31,157

Including the receipts and charges of the Civil and Public Works departments, but excluding the figures relating to the Army, the Post Office and Telegraph department, and the Home accounts, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 23,59,49,208, or Rs. 76,26,125 more than that of the previous year; the gross expenditure charged to revenue rose, by Rs. 96,58,468, to Rs. 9,84,80,534; these figures are, however, subject to alteration until the Finance and Revenue Accounts of the Government of India are finally made up by the Comptroller-General.

Surplus revenue

192. The surplus amounted to Rs. 13,74,68,674, or a decrease of Rs. 20,32,343 below that of 1917–18, due to an increase in expenditure which was only partly counterbalanced by an increase of revenue.

Cash balances

193. The year opened with a cash balance of Rs. 353 lakhs in the reserve treasury, the revenue treasuries and the Bank of Madras and its branches; the closing balance was Rs. 417 lakhs.

(*b*) IMPERIAL REVENUE AND FINANCE

General

194. The receipts on account of Imperial Revenue exceeded those of 1917–18 by Rs. 45,00,169. The improvement was chiefly under Excise (Rs. 30,46,354), Income-tax (Rs. 21,83,290), Salt (Rs. 15,74,458) and Stamps (Rs. 5,08,486), partly counterbalanced by decreases under net State Railway earnings (Rs. 13,80,814), Customs (Rs. 6,72,141) and Land Revenue (Rs. 6,02,228). The net transfer from Imperial to Provincial Revenues was Rs. 9,07,250 more than in the previous year. The Imperial expenditure charged to Revenue also exceeded that of 1917–18 by Rs. 16,86,996, chiefly under Refunds and Drawbacks (Rs. 3,70,186), Salt (Rs. 7,29,540), Excise (Rs. 1,50,112) and Civil Works (Rs. 4,10,582). The incidence of taxation per head of the population was Rs. 4-0-0·3 against Rs. 3-12-8·2 in 1917–18.

Land revenue*

195. The receipts from Land revenue amounted to Rs. 3,45,59,338, or Rs. 6,02,228 less than those of 1917–18. The more important variations in the district collections were increases in the districts of Madura (+Rs. 1·52 lakhs), Tinnevelly (+Rs. 0·54 lakh), and Gōdāvari (+Rs. 0·53 lakh) and decreases in certain other districts. The increase in Madura is attributed to the introduction of resettlement rates in certain taluks. The grant of larger remissions in 1917–18 explains the increase in Tinnevelly, while the improvement in Gōdāvari was caused chiefly by increase in the second crop revenue. The decreases were all mainly due to the grant of large remissions owing to the unfavourable character of the season. The incidence of taxation per head of the population amounted to Rs. 1–10–8 as against Rs. 1-11-2 in 1917–18 and was highest in the district of Kistna and lowest in Vizagapatam. The expenditure under Land Revenue being entirely Provincial is dealt with in the Provincial section.

Customs

196. The revenue under Customs is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs, exclusive of import duty on salt which was credited to Salt, amounted to Rs. 1,04,79,067 as against Rs. 1,10,77,915 in the previous year. There was a decrease of Rs. 6·10 lakhs under import duty, and it would have been more noticeable but for the high prices of articles which increased the ad valorem duties. The decrease appeared chiefly under cotton manufactures, petroleum and articles of food and drink, partly counterbalanced by increases under "Sugar and Tobacco." Export duty declined also by Rs. 3·60 lakhs owing to the prohibition of the export of rice to foreign countries. There was, however, an increase of Rs. 3·39 lakhs under "Excise duty on cotton manufactures" due to larger production coupled with enhanced value. The receipts under "Land Customs" amounted to Rs. 3,51,733 against Rs. 4,25,026 in 1917–18. The incidence of taxation per head of the population was As. 4-2 against As. 4-5 in 1917–18. The charges amounted to Rs. 4,49,559 as against Rs. 4,34,351 in the previous year.

Opium*

197. For information about Opium revenue, see infra under EXCISE ADMINISTRATION.

Salt

198. The number of salt factories rose from 71 to 85, of which 27 were monopoly factories and 58 excise factories. The latter part of the previous year had witnessed a great demand for Madras salt for Bengal and for the areas of this Presidency usually supplied from Bombay. This on the top of a series of lean years practically exhausted the reserves of stock in the Presidency, and at the beginning of the 1918 season the trade was leading a hand-to-mouth existence and it was only the early commencement of the manufacture in some areas that prevented the complete exhaustion of stocks. More than half of the total stocks in the Presidency on 31st March 1918 were in the Waltair and the Tinnevelly subdivisions, but the impossibility of securing freight made these stocks useless so far as this Presidency was concerned except for meeting local demands. There was therefore a very steep rise in wholesale prices at the factories and this.

* The receipts from Land revenue and the receipts and charges under Stamps, Excise (including the realizations of Opium revenue by the Excise department) and Income-tax (excluding Super-tax) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share. But the incidence of taxation has been calculated with reference to the total receipts.

induced the manufacturers to take the fullest possible advantage of the situation, a tendency which the department further encouraged by the offer of a bonus for salt scraped after certain dates, while the failure of the monsoon secured prolonged favourable climatic conditions and enabled the licensees to retain the labour which would otherwise have been diverted to agricultural operations. The result was that by the middle of August the record outturn of previous years had been surpassed. Retail prices ruled high at the beginning of the year almost throughout the Presidency, but particularly so in the inland districts where the scarcity of railway freight and the shortage of the supply of Bombay salt to which these districts were accustomed at one time threatened a salt famine. In order to secure some measure of control over these high prices, salt was issued at fixed rates to certain municipalities, unions and co-operative societies for sale to the public and was also put to auction at certain Government depots on market days. After the termination of the war however Bombay salt was again finding its way in considerable quantities into its usual markets, the new manufacturing season was beginning well and prices showed a general downward tendency. The total quantity of salt manufactured during the year amounted to 16,620,434 maunds, of which 6,100,616 maunds were Government salt and 10,519,818 maunds were excise salt as against 4,471,105 maunds and 6,581,553 maunds, respectively, in the previous year. The quantity of duty-paid salt imported by sea from the Bombay Presidency rose from 1,268,638 maunds to 1,370,425 maunds as a result of the increased stocks in Bombay, and that imported by rail from Bombay and Goa amounted to about 307,000 maunds as in the previous year. The quantity of duty-bearing salt imported by sea, chiefly from the United Kingdom, was 2,199 maunds against 1,709 maunds in the previous year. The issues for home and inland consumption of locally manufactured and imported salt rose from 12,160,721 maunds to 12,743,169 maunds. The quantity issued for export by sea was 76,550 maunds. The quantities issued to the French Government and to the Travancore and the Cochin Darbars were 69,110, 445,042 and 306,954 maunds respectively. The issues to Bengal fell from 608,507 maunds to 196,607 maunds owing to the increase of imports of foreign salt into Calcutta. The available stock of Government and Excise salt at the end of the year was 7,683,252 maunds as against 3,744,281 maunds in the previous year. The year's revenue amounted to Rs. 1,77,72,899 against Rs. 1,61,98,441 in 1917–18. The increase was mainly due to the increased demand for Madras salt, the increased stocks sold by Government and to the high prices obtained in the sales at auction. The incidence of taxation which is calculated with reference to the rate of inland consumption rose from As. 4–4·5 in 1917–18 to As. 4–11·7 in 1918–19. The charges amounted to Rs. 25,72,450 as against Rs. 18,42,910 in the previous year.

Excise* (Abkari)

199. For information about Excise revenue, see infra under EXCISE ADMINISTRATION.

Stamps*

200. The revenue from stamps improved from Rs. 77,11,598 to Rs. 82,20,084 as a result of the partial recovery of trade and business from the depression caused by the war and of the growth in litigation. The incidence of taxation per head rose from As. 5–11·5 to As. 6–4·2. The charges amounted to Rs. 2,43,846 as against Rs. 2,41,624 in the previous year.

Income-tax* (excluding super-tax)

201. The provisions of the Indian Income-tax Act of 1886 as amended by Act VIII of 1917 were revised by Act VII of 1918 in order to improve the method and machinery of assessment and to remove certain inequalities in the assessment of individuals, which became apparent since a graduated scale of the tax was introduced by Act VIII of 1917. The receipts from income-tax excluding super-tax amounted to Rs. 40,24,944 as against Rs. 38,30,350 in the previous year. The increase is attributable to assessments having been made in accordance with the provisions of the

* Vide footnote under "Land revenue" on page 86.

revised Act and the rules framed thereunder as well as to the commercial prosperity which arose out of war conditions. The incidence of taxation was As. 3–1·3 per head against As. 2–11·5 per head in the previous year. The charges rose from Rs. 34,147 to Rs. 44,953 owing to the revision of the income-tax establishments in Madras City, including the creation of the appointment of a Special Income-tax Officer.

Super-tax

202. The collections from super-tax amounted to Rs. 24,67,566 against Rs. 4,78,870 in the previous year. The increase was chiefly due to the fact that a large part of the taxes assessed in 1917–18 was collected in 1918-19, as assessments were made late in 1917–18 when the tax was introduced. The incidence of taxation per head rose from 2·2 pies to 11·4 pies. No charges were incurred during the year for the collection of the tax.

Other Imperial receipts

203. Imperial revenue from other sources amounted to Rs. 4,93,66,627 or a decrease of Rs. 16,18,175 which occurred chiefly under net State Railway receipts (Rs. 13,80,814).

Transfers between Imperial and Provincial

204. The important variations under the head "Transfers between Imperial and Provincial" as compared with the previous year were (*a*) the grant of a recurring assignment of Rs. 5,50,000 to Provincial Revenues for the development of primary education, (*b*) the grant of non-recurring assignments to Provincial Revenues amounting in all to Rs. 7,60,000 as detailed in the margin and (*c*) the further payment of Rs. 6,23,000 from Provincial to Imperial Revenues in addition to Rs. 6,25,000 paid in 1917–18 on account of the revenue realized in Madras in that year from the enhancement of the rates of income-tax as against Rs. 1,37,000 likewise paid in 1917–18 for 1916–17.

	Rs.
i. For agricultural education	3,50,000
ii. For the improvement of the health conditions of pilgrim centres	2,00,000
iii. For the construction of a building for the Madras Trade School	75,000
iv. For meeting the charges of the Provincial Director of Civil Supplies, the Provincial War Board and Publicity Board	85,000
v. For anti-malarial work	50,000
	7,60,000

Expenditure on famine relief*

205. The expenditure on famine relief measures incurred during the year amounted to Rs. 69,942.

Other Imperial expenditure

206. The remaining Imperial expenditure amounted to Rs. 75,18,217 against Rs. 68,04,036 in 1917–18. The increase occurred chiefly under Refunds and Drawbacks (Rs. 3·70 lakhs) and Civil Works in charge of Public Works officers (Rs. 4·11 lakhs), partly counterbalanced by a decrease under working expenses of Major Irrigation works (Rs. 1·06 lakhs). The increase under Refunds and Drawbacks was mainly due to heavy refunds of super-tax collections. That under Civil Works in charge of Public Works officers was only nominal, as it was due to the normal actuals of 1917–18 having been reduced by a sum of Rs. 3·99 lakhs, being the sale proceeds of the sites acquired in previous years for the construction of a new building for the Madras Currency office, which was credited to this head in abatement of charges. The decrease under working expenses of Major Irrigation works occurred mostly under establishment charges as the result of a change introduced with effect from 1st April 1918 in the system of allocation of Public Works establishment charges.

Capital outlay on State railways and Irrigation works not charged to revenue

207. The capital outlay on irrigation works not charged to revenue amounted to Rs. 5,89,502 against Rs. 5,62,967 in 1917–18, that on State railways was *minus* Rs. 4,38,879 against *minus* Rs. 6,88,676. Allowing for a credit of Rs. 6·30 lakhs included in the actuals of 1917–18, being recovery of advance made to the Tinnevelly-Tiruchendūr railway in 1916–17, the expenditure on State railways in 1918–19 was less than that of 1917–18 by Rs. 3·80 lakhs. The decrease occurred almost wholly under South Indian Railway (Rs. 3·69 lakhs).

Imperial loans

208. The opening balance under Imperial loans on the 1st April 1918 was Rs. 1,84,95,682. The loans granted during the year amounted to

* The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Imperial share.

Rs. 9,30,000. A sum of Rs. 9,00,000 was advanced to the Madras Corporation for expenditure on special drainage works. The repayments amounted to Rs. 5,64,206, the chief items being Rs. 72,420 by the Madras Corporation, Rs. 3,13,401 by the Madras Port Trust, Rs. 38,123 by the Tanjore District Board Railway and Rs. 1,29,167 by the Tinnevelly District Board Railway. The closing balance of the year was Rs. 1,88,61,476. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year, viz., Rs. 28,600, was duly paid. On the 31st March 1919 this sinking fund held Government securities of the face value of Rs. 14,42,300.

(*c*) REVENUE AND FINANCE OTHER THAN IMPERIAL.

Provincial revenues

209. The Provincial accounts opened with a balance of Rs. 2,01,08,437 on the 1st April 1918 and closed with a balance of Rs. 2,10,40,688 on the 31st March 1919. The transactions of the year thus yielded a surplus of Rs. 9,32,251, which was the net result of an aggregate revenue of Rs. 8,74,63,186 and an expenditure of Rs. 8,65,30,935.

Land revenue *

210. The receipts from Land revenue amounted to Rs. 3,45,59,338 and were less than those of 1917–18 by Rs. 6,02,228. The charges were Rs. 1,29,88,811 against Rs. 1,24,81,018 in the previous year, the increase being due chiefly to the grant of war allowances and to larger expenditure on temporary establishments of settlement parties.

Stamps, Excise and Income-tax *

211. The receipts from Stamps, Excise, and Income-tax amounted respectively to Rs. 82,20,085, Rs. 2,32,22,405† and Rs. 40,24,944 as against Rs. 77,11,599, Rs. 2,01,76,050, and Rs. 38,30,349 in the previous year. The corresponding charges were Rs. 2,41,624, Rs. 10,52,824,‡ and Rs. 44,952 as against Rs. 2,43,845, Rs. 9,02,713 and Rs. 34,146 respectively in the previous year.

Forests

212. The revenue from Forests amounted to Rs. 47,91,460 against Rs. 54,58,489 in the previous year. The decrease of Rs. 6·67 lakhs occurred almost wholly under Firewood and Other Minor Produce removed from the forests by consumers or purchasers (Rs. 6·58 lakhs). The want of facilities to contractors for the transport of produce by rail and a fall in coupe sales in certain districts owing to the lack of demand contributed to the decrease under "Firewood." That under "Other Minor Produce" was caused chiefly by the supply of tanning stuffs to the Military department at concession rates. The charges of the department amounted to Rs. 31,86,472 against Rs. 30,20,349 in the previous year. There was an excess expenditure of Rs. 1·66 lakhs—Rs. 1·08 lakhs under "Conservancy and works" and Rs. 0·58 lakh under "Establishment."

Registration *

213. The receipts under Registration were Rs. 27,38,200 against Rupees 24,72,459 in the preceding year, the increase of Rs. 2·66 lakhs occurring partly under Registration fees (Rs. 2·08 lakhs) and partly under miscellaneous receipts. The charges of the department amounted to Rs. 15,09,638 or Rs. 1,69,942 more than in the foregoing year.

Canal revenue

214. The canal revenue collected during the year amounted to Rs. 2,85,716 or Rs. 16,676 more than in the previous year.

Other Provincial receipts

215. The Provincial receipts under the remaining heads amounted to Rs. 73,24,964§ and were higher than those of the previous year by Rs. 3,80,036. There were increases under eleven heads (+Rs. 8,46,850) and decreases under seven heads (—Rs. 4,66,814). The increases were chiefly under Jails (+Rs. 3·27 lakhs), Medical (+Rs. 1·79 lakhs), Agriculture (+Rs. 0·61 lakh), Miscellaneous Revenue (+Rs. 0·61 lakh), Civil Works in charge of

* The receipts from Land revenue and the receipts and charges under Stamps, Excise (including the realization of Opium revenue by the Excise department) and Income-tax (excluding Super-tax) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share. But the incidence of taxation has been calculated with reference to the total receipts and is mentioned in the Imperial section.

† Includes share of Opium revenue credited to this head.

‡ Includes expenditure relating to Opium charged to this head.

§ Excludes net amount transferred from Imperial to Provincial which has been dealt with in the Imperial section.

Civil officers (+Rs. 0·57 lakh) and Superannuation receipts (+Rs. 0·54 lakh) and the decreases occurred mainly under Scientific and Miscellaneous departments (—Rs. 3·11 lakhs) and Courts of Law (—Rs. 1·00 lakh). The increase under Jails is due to larger supplies of jail-made goods to the Military department. Receipts from district headquarter hospitals taken over under Government management during the year, including contributions recovered from local bodies for the maintenance of those hospitals, account mainly for the increase under Medical. That under Agriculture was contributed for the most part by the high prices realized from the sale of cotton lint and seeds and from the produce of district farms as well as the farm attached to the Agricultural College. Larger adjustments on account of lapsed deposits credited to Government and variations in the amounts of unspent balances of Provincial contributions refunded by local bodies explain respectively the increase under Miscellaneous Revenue and under Civil Works in charge of Civil officers. Under Superannuation receipts the increase was caused by the recovery of pensionary contributions from local bodies which was hitherto waived on behalf of Civil Assistant Surgeons deputed for employment under them. The decrease under Scientific and Miscellaneous departments appeared chiefly under Cinchona receipts and it is attributed to smaller supplies of quinine indented for by the Medical Stores at Madras and Bombay. A receipt of Rs. 0·49 lakh included in the actuals of 1917–18, being the value of certain unclaimed Government promissory notes held by the Administrator-General and lapsed to Government, and small receipts in 1918–19 from magisterial fines and from the fees realized by the High Court for translation and printing work done for suitors explain the decrease under Courts of Law.

Expenditure on famine relief *

216. The expenditure incurred on famine relief measures amounted to Rs. 23,314.

Other Provincial expenditure

217. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 6,74,83,300 and was more than that of the previous year by Rs. 69,45,805. Increases amounting in all to Rs. 73,29,542 appeared under seventeen heads slightly counterbalanced by small decreases amounting to Rs. 3,83,737 which appeared under six heads.

Provincial loans

218. The Provincial advance and loan account (including loans to local bodies for railway construction) opened with a balance of Rs. 96,31,822 on the 1st April 1918 and closed with a balance of Rs. 96,10,261 on the 31st March 1919 ; advances amounted to Rs. 11,72,401 and repayments to Rs. 11,93,962. Ryots received advances to the extent of Rs. 7,70,775 as against Rs. 8,63,289 in the previous year. A loan of Rs. 62,000 was granted to the Trichinopoly District Board for the construction of bridges. Sums amounting to Rs. 5,000, Rs. 4,000, Rs. 35,000, Rs. 9,400 and Rs. 11,750 were advanced respectively to the Cocanada, Parlākimedi, Tiruvannāmalai, Dhārāpuram and Narasaraopet Municipal Councils for town surveys. The Municipal Councils of Vizagapatam and Masulipatam took advances of Rs. 15,400 and Rs. 1,19,670, respectively, for water-supply. The Madura Municipality borrowed Rs. 36,000 for drainage and water-supply and Rs. 65,840 in connexion with the Madichiyan extension scheme. A loan of Rs. 12,500 was taken by the Coimbatore Municipal Council for making an advance to the Othechekkars Building Society at Coimbatore. No loans were granted to co-operative societies during the year.

Local Funds

219. The following paragraphs deal with funds raised from special sources and devoted to special objects and not to general purposes of the administration (Imperial and Provincial). The funds comprised under the head " Local Funds " are local funds constituted under Act V of 1884, the Irrigation Cess Fund, Port and Marine Funds, and other funds which are mentioned below seriatim.

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* The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Provincial share.

(1) For information about Local funds constituted under Act V of 1884, see supra Chapter III, LOCAL BOARD ADMINISTRATION.

Local Funds Act V of 1884

(2) The receipts and charges of the Bhadrāchalam-Nugur Special Fund amounted to Rs. 4,263 and Rs. 9,253, respectively, against Rs. 9,333 and Rs. 10,243 in the previous year, and the fund closed with a credit balance of Rs. 10,646. The decrease under receipts was due to the postponement of the collection of a part of the revenue to the succeeding fasli.

Bhadrāchalam-Nugur Special Fund

(3) The Irrigation Cess Fund which exists in the districts of Chingleput, Trichinopoly, Salem, Madura and Coimbatore opened with a balance of Rs. 82,662. The receipts and charges amounted to Rs. 38,422 and Rs. 53,420, respectively, against Rs. 43,613 and Rs. 60,842 in the previous year. The closing balance was Rs. 67,664.

Irrigation Cess Fund

(4) The Madras Port Fund opened with a balance of Rs. 32,074 and closed with a balance of Rs. 19,104. The income of the fund amounted to Rs. 78,774 and its expenditure to Rs. 91,744. There was a fall in the amount of mooring fees collected during the year owing to the abolition of super-dues. The Minor Ports Fund opened with a balance of Rs. 43,218 and closed with a balance of Rs. 90,497; the receipts and charges amounted to Rs. 3,78,666 and Rs. 3,31,387, respectively. The fund advanced a loan of Rs. 10,000 to the Madras Coast Lights Fund. A free grant of Rs. 3,44[illegible] was also made to the Cocanada Landing and Shipping Fund. A sum of Rs. 42,090 in all was repaid towards the principal of the loans taken in previous years by the Madras Coast Lights Fund and the Landing and Shipping Funds of Tuticorin, Negapatam, Cocanada, Cochin, Calicut and Adirāmpatnam. The fund took a loan of Rs. 50,000 from the Bank of Madras on the security of Government promissory notes of the face value of Rs. 80,000. The total security balance of the fund on the 31st March 1919 was Rs. 7,26,700 (face value) exclusive of the securities for Rs. 80,000 deposited with the Bank of Madras. The income and expenditure of Pilotage Funds (outports) amounted to Rs. 13,447 and Rs. 11,482, respectively. The opening and closing balances were Rs. 4,700 and Rs. 6,665, respectively. The opening balance of the Landing and Shipping Funds amounted to Rs. 3,00,549, the receipts and charges to Rs. 2,94,871 and Rs. 2,62,242 and the closing balance to Rs. 3,33,178. The invested balance to the credit of the funds was Rs. 3,75,800. The Madras Coast Lights Fund opened with a balance of Rs. 30,990 and closed with a balance of Rs. 10,718 ; the receipts and charges of the year were Rs. 1,12,629 and Rs. 1,41,901, respectively. The fund repaid a free grant of Rs. 10,000 and a loan of Rs. 11,000 received from the Minor Ports Fund in 1917-18 as the expenditure on the installation of an acetyline light at Gopalpur for which the grant and the loan were given was subsequently adjusted under the Minor Ports Fund. A fresh loan of Rs. 10,000 was obtained from the said fund to meet in part a payment of Rs. 19,104, being interest due on a loan taken from the Imperial Government.

Port and Marine Funds
The Madras Port Fund
The Minor Ports Fund
Pilotage Funds (outports)
Landing and Shipping Funds
The Madras Coast Lights Fund

(5) The receipts and charges of the Cantonment Funds amounted to Rs. 5,68,197 and Rs. 6,43,513, the result being a deficit of Rs. 75,316, which reduced the balance from Rs. 1,06,825 to Rs. 31,509. The bulk of the deficit was mainly due to larger expenditure incurred by the Secunderabad Cantonment Fund on public works and on the purchase of conservancy articles.

Cantonment Funds

(6) The Cantonment Hospital Fund, Secunderabad, opened with a balance of Rs. 227 and closed with a balance of Rs. 243. The receipts and charges amounted to Rs. 11,163 and Rs. 11,147, respectively.

Cantonment Hospital Fund, Secunderabad

(7) The Civil Hospital Fund, Secunderabad, opened with a balance of Rs. 6,165. The receipts and charges amounted to Rs. 86,516 and Rs. 88,791, respectively. The closing balance was Rs. 3,890.

Civil Hospital Fund, Secunderabad

(8) The opening and closing balances of the University Fee Fund were Rs. 36,337 and Rs. 1,07,151, respectively. The receipts and charges amounted respectively to Rs. 5,64,909 and Rs. 4,94,095. The invested

University Fee Fund

balance at credit of the fund was Rs. 7,96,800 (face value) in Government securities, Rs. 1,25,000 (face value) in Indian Treasury Bills, and Rs. 70,000 in fixed deposits with the Bank of Madras.

Kumbakōnam College Hostel Fund

(9) The receipts and charges of the Kumbakōnam College Hostel Fund amounted to Rs. 4,039 and Rs. 4,315, respectively, and the cash balance at credit of the fund was reduced from Rs. 749 to Rs. 473.

Mrs. A. V. Narasinga Rao's College Fund

(10) The opening and closing balances of Mrs. A. V. Narasinga Rao's College Fund were Rs. 53,689, and Rs. 41,830 respectively. The receipts and charges amounted to Rs. 32,354 and Rs. 71,213, respectively. The latter included Rs. 39,500 withdrawn from treasury for investment. There was an invested balance of Rs. 1,40,000 (face value) to the credit of the fund at the close of the year.

Vizagapatam Hospital Fund

(11) The Vizagapatam Hospital Fund opened with a balance of Rs. 3,985. The receipts and charges amounted to Rs. 5,107 and Rs. 5,879, leaving a balance of Rs. 3,213, which was credited to Government account owing to the transfer of the hospital to Government management with effect from 1st July 1918.

Hyderabad Residency Bazaar Fund

(12) The receipts and charges of the Hyderabad Residency Bazaar Fund amounted to Rs. 1,67,805 and Rs. 2,37,399, respectively, and the balance was thus reduced from Rs. 2,17,770 to Rs. 1,48,176.

Secunderabad Local (Abkāri) Fund

(13) The opening balance of the Secunderabad Local (Abkāri) Fund was Rs. 1,97,154. The receipts and expenditure were Rs. 10,44,558 and Rs. 9,20,117, respectively, thus raising the closing balance to Rs. 3,21,595.

MUNICIPAL REVENUES

220. See supra Chapter III, MUNICIPAL ADMINISTRATION—MUFASSAL AND MUNICIPAL ADMINISTRATION, CITY OF MADRAS.

EXCISE ADMINISTRATION

[*Report on the Administration of Abkāri Revenue for* 1918–19]

Administrative changes

221. The whole question of excise administration in the Agency tracts was investigated during the year. In the Ganjām Agency, where all the shops had been closed, no immediate reform was considered necessary, but sanction was accorded to the appointment of a special Assistant Inspector to study the use and abuse of the privilege of free distillation by the hill people and the extent to which drunkenness prevails. In regard to the Vizagapatam Agency also, further investigation was found necessary before the number of outstills could be reduced or the contract distillery system extended and three Assistant Inspectors were sanctioned for duties similar to those assigned to the Assistant Inspector in Ganjām. In the Gōdāvari Agency, the Board's proposals to abolish the nominal fee system, to allow free distillation for bona fide home consumption, to abolish the outstills and to establish central distilleries for the manufacture and supply of *mahua* arrack at a low rate of duty and to extend the contract distillery system were sanctioned during the year. The excise duty on country spirits was raised during the year by 62 per cent in Malabar excluding the Wynaad taluk, 35 per cent in Ganjām, Vizagapatam and South Kanara, 29 per cent in the Ceded districts and Kurnool, 23 per cent in Madras and the Saidapet taluk of the Chingleput district and 18 per cent in the rest of the Presidency. The rates of tree-tax were enhanced by 25 per cent in Ganjām, Vizagapatam, South Kanara and Malabar, $33\frac{1}{3}$ per cent in the Ceded districts and Kurnool and 20 per cent in the rest of the Presidency except Rāmnād and Tinnevelly with effect from 1st October 1918. The duty on ganja was enhanced from Rs. 12–8–0 to Rs. 15 and the issue price of opium was raised from Rs. 41–8–0 to Rs. 45 a seer. The sweet juice rules were withdrawn from the Madras

Town Circle with effect from 1st October 1918. Four co-operative societies were formed during the year, two in each of the Bhīmavaram and Tanuku taluks of the Kistna district, among the sweet juice tappers in order that they might be able to place their produce in the market without the interference of middlemen. The rules for the protection of date trees from destruction by improper methods of tapping were withdrawn in respect of privately owned trees with effect from 1st October 1918 and those in regard to Government trees have since been revised. The rules and licence conditions governing the possession and sale of cocaine were revised with the object of making it impossible to obtain the drug more than once on the same prescription without the express authority of the medical practitioner who prescribed it.

Licensing Board and Advisory Committees

222. The Excise Licensing Board appointed for the City of Madras with power to determine the number and location of shops for the sale of intoxicants of all kinds met on five occasions, and as a result of their deliberations two toddy shops were closed and the sites of three were altered. Two arrack and six toddy shops were ordered to remain closed on week days from 11-30 a.m. to 1-30 p.m., on the afternoon of pay days and on Sundays except between the hours of 11-30 a.m. and 4 p.m., on account of their proximity to mills and factories. Collectors were empowered to form Excise Advisory Committees in unions with a population of not less than 8,000 inhabitants and such committees were formed in 57 unions. The Committees recommended the closure of 67 shops and the change of sites of 121, and their recommendations were given effect to in 60 and 113 cases, respectively. Shops were also closed by Collectors independently of the recommendations of the Committee either on their own initiative or on complaints of the Police, Land Revenue, Abkāri and other departments or of local boards. The number of shops thus closed in municipalities, unions and other areas was 866.

Temperance measures

223. The general issue strength of arrack throughout the Presidency was reduced to 35° U.P., while in seven districts 35 shops were restricted to the sale of 60° U.P. only. Arrack at 40° U.P. was, as usual, supplied to the tracts round Pondicherry. The other measures which were taken to promote the cause of temperance were the introduction of an earlier closing hour generally (8 p.m.), the removal of rural shops from the main roads, the closure of shops near mills and other works employing large bodies of labour at certain hours on pay days and Sundays, and the partial or total closure of shops on market days and festival occasions. All the shops in the Agency tracts of Ganjām were closed as a part of the scheme for relieving the economic depression of the hill tribes. In April 1918 there was a widespread temperance movement amongst the Reddis in Ganjām district, as a result of which the Collector closed twenty shops; but the enthusiasm quickly evaporated, the demand for liquor revived and was met illicitly, so that the Collector was forced to reopen sixteen of the shops. A similar movement is on foot amongst the Maravars in Rāmnād district and in deference to their wishes three arrack and six toddy shops were closed during the year. The licences for the arrack and toddy shops at Punakayal in the Tinnevelly district were revoked during the currency of the lease at the request of the villagers. The Board arranged with the Young Men's Christian Association that a coolies' canteen should be opened by Government and managed by the association at the Salt Cotaurs Depot for the benefit of the large number of coolies employed there. Plans and estimates have been prepared, but have not yet been put into execution.

Country spirits

224. The number of shops in the distillery area was reduced from 6,619 to 6,352. The total revenue from country spirits in the Excise tracts rose, by Rs. 27 lakhs, to Rs. 188·92 lakhs. The increase occurred under both excise duty and rentals. The proportion of still-head duty to total revenue was 72 per cent. The consumption rose slightly, being 1,672,492 proof gallons or 0·42 proof gallon per head of the population against 1,648,150 in 1917-18.

Toddy

225. The number of toddy shops was reduced from 11,399 to 11,034. The total revenue on toddy amounted to Rs. 215·84 lakhs as against Rs. 187·21 lakhs in 1917-18. The increase occurred under both vend rents and tree-tax, the vend rents forming 56·1 per cent of the total revenue. The number of trees tapped expressed in terms of coconuts was 23·28 lakhs up to July 1919 against 23·44 lakhs up to July 1918 and the consumption per head was roughly 2·73 gallons against 2·79 gallons in the previous year.

Foreign liquor

226. The quantity of foreign liquor imported by sea during the year showed a further falling off of 67,221 gallons, 40·2 per cent of which consisted of ale, beer and porter. The quantity of foreign spirits locally manufactured was 28,120 proof gallons against 16,953 in 1917-18. The total issues of beer from the local breweries amounted to 1,646,873 gallons and the imports from Bangalore to 68,582 gallons. Out of the former quantity 610,922 gallons were exported to places beyond the Presidency.

Finance

227. The total Abkāri revenue rose from Rs. 1,89,67,770 to Rs. 2,20,36,420. The incidence of taxation per head of the population was Rs. 1-0-11·8 against As. 14-7·4 in the previous year. The charges amounted to Rs. 10,51,864 in 1918-19 as compared with Rs. 9,05,097 in 1917-18.

Opium and intoxicating drugs

228. The total issues of opium within the Presidency were 36,964 seers against 37,381 seers in 1917-18. The number of shops fell from 650 to 638. With effect from 1st April 1918 the cost price of opium was raised from Rs. 11 to Rs. 13 per seer and the share of the issue price creditable to "Excise" from Rs. 30-8-0 to Rs. 32 per seer. The revenue credited to "Opium" and the gain on sale-proceeds credited to "Excise" amounted, respectively, to Rs. 6,03,150 and Rs. 7,00,752 against Rs. 5,23,025 and Rs. 7,03,882 in the previous year. The amount of shop rentals and miscellaneous revenue credited to "Excise" was Rs. 4,85,232 against Rs. 5,04,398 in 1917-18. The total opium revenue thus realized by the Excise department increased from Rs. 17,31,305 to Rs. 17,89,134. The incidence of taxation per head of the population was 9·9 pies as in the previous year. The charges amounted to about Rs. 1,000 as in the previous year. The quantity of hemp drugs consumed fell from 47,181 seers in 1917-18 to 45,052 seers and the number of retail licences remained the same, viz., 413. The total revenue from hemp drugs was Rs. 14·05 lakhs against Rs. 12·23 lakhs in 1917-18. The average consumption per head was ·072 tola of opium and ·087 tola of hemp drugs. The number of licences for possession and sale of cocaine and allied drugs rose from 125 to 136 and the quantity consumed from 41 ounces and 24 grains to 68 ounces, 14 drams and 11 grains. Inquiries were made during the year to ascertain if there was any sign of the cocaine habit spreading, but no indications of this were found.

Offences

229. The number of offences against the abkāri law remained practically the same, viz., 14,973 cases against 14,938 of the previous year, but with this difference that there was an increase of 675 cases under the more serious offences of illicit distillation and illicit manufacture of toddy. Illicit traffic in opium and ganja continued. There was no indication of any slackening in the daring and vigour with which this export business was carried on and it is obvious that the trade was sufficiently lucrative to bear serious losses and severe penalties.

CHAPTER VI

VITAL STATISTICS AND MEDICAL SERVICES

DETAILS OF CENSUS

230. *Vide* pages 244 to 246 of the Report on the administration of the Madras Presidency for the year 1911–12.

BIRTHS AND DEATHS (1918)

[*The fifty-fifth annual report of the Sanitary Commissioner, Madras, 1918; Report on the working of the Births, Deaths and Marriages Registration Act of* 1886 *in the Madras Presidency during* 1918–19; *Statistics of British India, Vol. III, Public Health—Vital Statistics*]

Population

231. Exclusive of Europeans and Eurasians, the hill tribes of Ganjām and Vizagapatam districts, and the inhabitants of the Laccadive islands and of the Banganapalle and Pudukkōttai States, the estimated population of the year was 44,524,439. The actual figure at the end of the year was, however, 43,635,037, the large difference of 889,402 being attributable to the abnormally high death-rate from influenza. Emigration during the year was restricted to the Straits Settlements, Burma and Ceylon; the total number of emigrants therefore further fell from 252,838 to 242,722. Immigrants totalled 213,782 against 227,180 in 1917 and were less than the emigrants by 28,940 as against 25,973 in the previous year.

Registration of vital statistics

232. The machinery employed for the registration of vital statistics, both in urban and rural areas, and the system followed for the collection and tabulation of the results obtained underwent no change during the year. Except in Madras City where medical officers of the grade of Sub-Assistant Surgeon are employed as Registrars of Births and Deaths, the work of registration was performed by laymen in the same unsatisfactory manner as in previous years. The Madras Registration of Births and Deaths Act, 1899, was in force in only 334 unions and 2,368 villages, or in eight unions and ten villages more than in the previous year. The

Births

total number of births registered was 1,156,204, showing a decrease of 138,874 from the previous year's figure, giving a birth-rate of 28·9 per mille as against 32·4 per mille for 1917. The recorded birth-rate was also less than that of the decennial average for the ten years ending with 1917 by 3·3 per mille. Excluding Madras, which had a birth-rate of 38·5 as against 45·4 per mille in the previous year, the highest birth-rate was recorded in Chingleput (37·3) and the lowest in Nellore (18·4). Compared with the previous year all the districts with the single exception of Ganjām showed a decreased rate, the decrease being prominent in South Arcot (—7·8). The proportion of male to female births was 104·6 to 100 as against the previous year's figures of 104·4 and 100. Muhammadans, as usual, returned the largest birth-rate, Hindus and Indian Christians coming next; but the decreased birth-rate of the year was universal among all communities. The birth-rates in compulsory and non-compulsory rural areas were 29·2 and 28·4 per mille as against 33·3 and 31·6 per mille respectively. Calculated on the census population of 1911, the recorded birth-rate in rural towns was 22·4 per mille and the municipal birth-rate 34·4 as against 27·3 and 38·9 respectively in 1917.

Chapter VI
VITAL STATISTICS AND MEDICAL SERVICES

Deaths

The number of deaths registered during the year was 1,722,003, or an increase of 672,458, over the previous year's figure. The death-rate was 16·8 per mille over and above the previous year's figure and 19·3 over the decennial average. This abnormal rise was due to influenza which affected one and all of the districts of the Presidency. Increased death-rates were marked in the Ceded districts as usual, Bellary heading the list with a death-rate of 93·3 per mille as against 45·8 per mille in 1917. There was a rise in mortality under all other heads excepting "Plague" and "Injuries." The notable feature of the year was the uncommon high rate of mortality among Hindus, the rate recorded being 43·4 as against 26·3 per mille in 1917. The infantile death-rate in the districts during the year was also high, being 230·2 per mille of registered births as against 194·0 in the previous year and a quinquennial average of 188·0. Distinguished by sex, out of every hundred deaths 52·6 were males and 47·4 were females, the corresponding figures for the previous year being 53·3 and 46·7. As in several previous years, Madras City returned the heaviest infantile mortality. In municipalities the total infantile mortality averaged 282·1 per mille of the registered births as against 246·4 in 1917 and the quinquennial average of 243·4 per mille. Considered with reference to sex, in every 100 deaths there were 53·4 males and 46·6 females. These heavy mortality rates among infants are, as is too well-known, due to women in labour being attended by ignorant village barber women, to tetanus caused by cutting the umbilical cord with dirty knives or scissors and the application of any rubbish at hand to the cut end to prevent bleeding and the drugging of new born infants with crude mercurial preparations and other injudicious methods of treatment. The severe scarcity and famine conditions of the year and the general unhealthiness of the Presidency as a whole due to influenza were additional factors which brought about this result.

Chief diseases

233. The general health of the Presidency during the year was very unsatisfactory. This is attributable to two chief causes, namely, the severe economic distress and the consequent lowering of vitality of the people and therefore of resistance to infection and the widespread prevalence of influenza. Neither of these is likely to remain a permanent disturbing factor.

Influenza

Official information about the prevalence of influenza is meagre because it is not a recognized head of death causation in the vital statistical returns. On a rough calculation the total number of deaths from that disease till the end of December 1918, may be taken as a little over 6½ lakhs. During the period of its severity it raged in epidemic form throughout the Presidency. No district escaped it, and those which suffered most were Bellary, Salem and Vizagapatam, in each of which the mortality figures exceeded 50,000. The lowest number of deaths was returned by the Nilgiris. It was only in urban areas, where the medical profession is adequately represented, that any scientific treatment of the disease was possible. In the mufassal the general ignorance of the masses combined with the absence of suitable medical organizations contributed largely to the abnormal death-rates.

Cholera

Cholera was unusually severe during the year and was in an epidemic form in most districts. Deaths from this cause numbered 122,263, which represents 7·1 per cent of the total mortality in the Presidency for the year and a death-rate of 3·0 per mille on the census population of 1911 as against 1·5 per mille in 1917 and 0·4 in 1916, the quinquennial average being 1·1 per mille. The disease appeared in every district of the Presidency and existed throughout the year in all but four districts, Cuddapah and Nellore returning the highest death-rates. The incidence of mortality was heaviest in January and February, June and July and November and December. As in the previous year, several cholera parties were employed to combat the disease in rural areas. The chief measures followed by them were hankinization of drinking water-supplies and their subsequent protection from contamination, isolation of infected patients and disinfection of their homes and clothing, administration and distribution of medicines and education of the masses as to the causes of

spread of cholera and the advantages of attending to personal hygiene and surroundings. These measures were on the whole appreciated by the people at large and little opposition was raised thereto. In a few cases Sir Leonard Roger's method of treatment by saline injection was also attempted with good results. Smallpox claimed 58,752 victims during the year as against 34,958 in 1917, representing annual ratios of 1·5 and 0·9 per mille, respectively, against the quinquennial average of 0·6 per mille. Cases were reported from all the districts of the Presidency, Guntūr returning the highest death-rate of 2·9 per mille. Nearly two-thirds of the deaths occurred among children under ten years of age, and this points to backward infantile vaccination. The incidence of mortality from this disease was heaviest between January and May. In rural towns the annual death-rate was 0·8 per mille and in rural tracts 1·5 per mille, while in municipal areas it was 2·1 per mille. This appears to show that the powers of compulsory vaccination were not exercised to the full advantage in municipal towns. Deaths from plague fell from 24,708 or 0·6 per mille in 1917 to 12,859 or 0·3 per mille in 1918, against the quinquennial average death-rate of 0·2 per mille. The disease was present all the year round in the districts of Anantapur, Bellary, Coimbatore, North Arcot and Salem. Under fevers a total of 896,088 deaths was registered during the year as against 321,902 in 1917. These figures give annual ratios of 22·4 and 8·0 per mille, respectively, the quinquennial average being 7·4. The exceptionally large number of deaths returned during the year is due to the inclusion under this elastic head of cases of influenza, for which, as stated above, no separate statistics were compiled. No district in the Presidency was free from malaria and large tracts in several districts were highly infected with it. Anti-malarial operations on approved methods and with properly trained staffs were undertaken only in a few places, the principal among them being Madras City and Ennore and its surroundings in the Chingleput district. No operations on a larger scale could be attempted owing to the paucity of properly trained medical men due to war conditions. Deaths from dysentery and diarrhœa aggregated 79,841 or 2·0 per mille against 73,394 or 1·8 per mille in the previous year. Madras, as usual, returned the heaviest mortality rate, viz., 10·9 per mille as against 8·1 in the previous year. Mortality from respiratory diseases rose slightly, the ratio being 1·6 per mille as against 1·3 in 1917 and a quinquennial average of 1·1. Deaths from "all other causes" aggregated 480,596 against 475,175, which represent annual ratios of 12·0 and 11·9 per mille, respectively.

Smallpox

Plague

Fevers

Dysentery and diarrhœa

Other diseases

234. Amongst Europeans and Eurasians there were 202 births, 76 in Madras City and 126 in the mufassal, and 170 deaths, of which 67 were registered in Madras and 103 in the mufassal. The highest mortality was from influenza and other fevers. Pneumonia, diseases of the heart, diarrhœa and dysentery also claimed many victims. The number of baptisms and burials, for which returns were received by the Registrar-General of Births, Deaths and Marriages, was 1,311 and 1,123, respectively, as against 1,553 and 866 in the previous year. The number of licences in force under the Indian Christian Marriage Act, 1872, was 730, or four more than in the previous year, while the number of marriages contracted by European Christians fell from 449 to 391.

Europeans and Eurasians (1918-19)

EMIGRATION AND IMMIGRATION (1918)

[*G.O. No.* 905, *Home (Miscellaneous), dated* 16*th May* 1919; *Statistics of British India, Vol. IV, Administrative, etc.—Emigration*]

235. There was no recruitment during the year. Indentured emigration to the West Indies and Fiji was prohibited by Government from 1st April 1917. One thousand three hundred and seventy-three emigrants returned from Natal in three ships. There was, as in previous years, no emigration to the French Colonies.

Regulated

Non-regulated

236. The number of passengers to the Straits Settlements fell, by 25,304, to 67,454. This was due to restrictions placed on recruiting on account of the limited shipping facilities between India and the Straits Settlements and to a smaller demand for labour on the rubber plantations in the Malay States. The number of passengers to Burma and Ceylon showed, respectively, an increase of 17,021 and a decrease of 1,833; but it is impossible to distinguish emigrants who go to stay from other passengers who come and go frequently. The increase in the number of passengers to Burma occurred principally in Ganjām and was due to the failure of crops in the north of the district. The number of persons recorded as having taken passages to ports outside the Presidency but within British India was 7,481 as against 6,646 in the previous year. The great majority of these consisted as usual of passengers from South Kanara to Bombay coast ports. The number of persons who returned from Burma slightly declined. This was due to fewer vessels having called at the ports of the Ganjām and Vizagapatam districts. The arrivals from the Straits decreased more or less in proportion to the number who went there.

MEDICAL RELIEF (1918)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year* 1918; *Statistics of British India, Vol. III, Public Health—Hospitals*]

General

237. The principal event of the year was the wide prevalence of influenza and the measures adopted to combat the disease. Two waves of this epidemic passed over the Presidency, one in July and the other in October 1918, the latter being the more severe of the two. The chief peculiarity of the disease was the great liability to broncho-pneumonia which accounted for the high death-rate that attended it. All classes of people were affected in towns as well as in villages, in the plains as well as on the hills. The higher the altitude of the station the more fatal the disease proved to be; for instance, in the Anamalais and on the Nilgiris the death-rate was higher than in Madras. The crowded parts of large towns suffered more than the sparsely inhabited ones. It could not be controlled by any specific treatment and no vaccine was available in 1918. Local Boards and Municipalities asked for extra medical men to combat the epidemic, but it was not possible to comply with their requisitions fully on account of the paucity of medical subordinates due to the absence of many of them on military duty. In the City of Madras over a hundred students of the Medical College and the Rāyapuram Medical School were placed at the disposal of the Health Officer of the Corporation for the purpose of affording relief to people suffering from influenza. The members of the Social Service League and the Ambulance Corps also co-operated with the Health Officer in the relief operations.

Staff

238. Including two retired officers the number of Indian Medical Service officers on duty in the Presidency during the year was the same as in 1917, namely, 18. Of these no less than 12 officers were, as in the preceding year, attached to the different institutions in the Presidency town. Three were in administrative charge of the districts of Coimbatore, Madura and the Nilgiris. One was in charge of the Civil Surgeoncy, Coonoor, and another held charge of the Pasteur Institute. One proceeded on leave on medical certificate. A private medical practitioner specially appointed held charge of the Malabar district. Civil Surgeons and Civil Assistant Surgeons were in charge of the remaining districts and civil surgeoncies. Owing to the exigencies of war 93 Sub-Assistant Surgeons under ten years of service and 63 temporary Sub-Assistant Surgeons held independent charge of dispensaries.

Medical institutions

239. At the end of the previous year there were 707 medical institutions actually at work, and, as a result of several changes which took place during 1918, 721 hospitals and dispensaries were open to the public at its

close, of which 42, or two more than in the previous year, were institutions for women and children. Thirty-two public hospitals, or double the previous year's number, were maintained by the State including one for women and children. Local Funds maintained 513 dispensaries, or three more than in the previous year, of which 22 were for women and children as against 21 in 1917. Seventy-six institutions, or four less than in the previous year, were maintained by private agencies, of which 29 received State aid as against 27 in 1917. Nineteen of these were maintained for women and children, of which four received State aid. Forty-seven were railway hospitals and the remaining 53 were State institutions maintained for the benefit of special departments, of which no less than 41 were for the police. Fifteen headquarter hospitals were taken over by Government during the year.

Relief

240. At the State-public, Local Fund and Private aided institutions, the number of patients treated fell, by 80,411, to 7,543,205. The decrease occurred in the mufassal institutions of Guntūr, Vizagapatam and South Arcot. The number of in-patients treated was 115,154 or 7,784 in excess of the previous year's figure. Of these, there were 15,784 patients in the hospitals for women and children as against 18,486 in 1917. The number of beds available rose, by 142, to 3,784 for men and, by 64, to 3,012 for women. Of the total number of in-patients 61·63 per cent were returned as cured as against 63·44 in the preceding year. The number who died was 6,792 which gives a death-rate of 5·90 per cent of the total treated as against 4·30 per cent in 1917. The higher death-rate was due to pneumonia and infective diseases on account of the prevalence of influenza. Although the General Hospital, Madras, had been showing a steady decrease in the number of patients treated from 1914 to 1917, there occurred an increase in 1918 of 961 in-patients and 1,848 out-patients. The total number of operations performed on 302,344 patients was 308,932, showing an increase of 4,159 operations, the bulk of which occurred under minor operations. The number of really serious operations (major) performed was 16,548 as against 17,202 in the previous year. There was a slight rise from 0·21 per cent to 0·27 per cent in the death-rates among the patients operated upon and no less than 95·53 per cent were cured as against 92·77 per cent in 1917. The total number of in-patients treated in private non-aided institutions rose, by 174, to 15,922, but the number of out-patients treated fell, by no less than 48,863, to 331,938. In State-special and railway dispensaries the number of in-patients treated rose, by 453, to 11,498 and that of out-patients by over 28,000, to 271,588. The increase occurred specially among the patients treated in railway institutions. Among the in-patients at the public and aided institutions, the largest number of admissions was as in the previous year for systemic diseases—54,229 as against 53,689 in the previous year. Labour cases came next although they showed a decrease of 1,741 as compared with the previous year, the fall occurring largely in the number of out-door labour cases. The admissions under infective diseases rose from 8,514 to 35,795, the increase being due mostly to influenza, cholera and pneumonia (influenzal). As in the previous year the principal diseases treated in the out-patients' department in the order of greatest prevalence were those of the skin and of the digestive system. In Police and Railway hospitals infective diseases and diseases of the digestive and respiratory systems contributed the largest number of in-door and out-door patients. In the various hospitals and dispensaries of the Presidency the vaccinal condition was noted in 1,053 smallpox cases. As in the previous year, no death was reported among the revaccinated. Among the unprotected the percentage of mortality was 39·16, while among the protected it was only 8·86.

Diseases

Finance

241. The year opened with a cash balance of Rs. 0·31 lakh as against Rs. 0·32 lakh in 1917. Under receipts the Government contributed Rs. 12·12 lakhs; the contributions from Local Funds decreased, by Rs. 1·68 lakhs, to Rs. 12·29 lakhs and those from Municipalities, by Rs. 0·18 lakh, to Rs. 6·66 lakhs. Public subscriptions on the other hand rose, by Rs. 1·27 lakhs, to Rs. 2·31 lakhs and miscellaneous receipts, by Rs. 0·14 lakh, to

Rs. 1·50 lakhs. The total receipts thus amounted to Rs. 35·67 lakhs, or an increase of more than 3 lakhs of rupees over that of the previous year. The total expenditure which occurred under all heads increased, by Rs. 3·10 lakhs, to Rs. 35·36 lakhs. Omitting the amount incurred on buildings, investments and diets, the cost per patient treated amounted to As. 5–8 and the daily average cost per diet was As. 3–8, the corresponding figures for the previous year being As. 5–1 and As. 3–5.

Madras Medical College (1918-19)

242. The eighty-fourth session of the Madras Medical College commenced on the 2nd July 1918 and terminated on the 31st March 1919. There were 496 students on the rolls of the institution during the session as against 473 in the previous year. The number of students who were attending the University classes was 310 as against 292 in the previous year, of whom 17, or two more than in the previous year, were women students. There was a further fall from 52·5 to 50·1 in the percentage of passes at all the University examinations. The percentage of failures in the final examination was less in Medicine and greater in Surgery as compared with the previous year. All the women students who appeared for the Second M.B., Third M.B. and Final M.B. were successful. But of the five who appeared for the First M.B. examination only one qualified for the L.M. & S. The number of military pupils admitted was the same as in the previous year, namely, 21. There were 104 students under training in the apothecary department, of whom 22 were women students. Of the 39 women students in the college and apothecary departments 12 were Europeans and Anglo-Indians, 20 were Indian Christians, three Brahmans and four Non-Brahman Hindus ; 34 were Dufferin scholars stipended by the Government of Madras, one held a stipend from the Cochin State and the rest were not in receipt of any stipend. The subordinate teaching staff of the college was reorganized during the year. Under this reorganization all Assistant Surgeons in the college and in the General, Maternity and Ophthalmic Hospitals actually engaged in imparting clinical instruction to students were made Assistants to the Professors in the college and Assistants to the Surgeons or Physicians in the Hospital, and their teaching allowance was fixed on a uniform scale. The students were, as usual, keen on athletics, and the various events at the college annual sports held during the year were as usual well contested. The college won the Wilson cup, the Raja Venugopal cup for football and the Inter-collegiate and the Y.M.C.A. Hockey cups.

Medical schools (1918-19)

243. There were 820 pupils in the medical schools at Rāyapuram, Tanjore, Vizagapatam and Calicut as against 662 in the previous year. A new school was opened at Madura on the 1st July 1918 with the object of removing congestion in the other schools in the final years of study when students require clinical material. It began with 30 students transferred from the Tanjore and Rāyapuram schools, and the results achieved at the Board Examination were very satisfactory. The number of private pupils in all the schools rose from 247 to 388. For the final Board Examinations in March and September 1919, 104 pupils appeared for the diploma of L.M.P. from the medical schools, Rāyapuram, Tanjore, Vizagapatam and Madura, as against 95 in the previous year, of whom 77 passed as against 88. The foundation stone of the new Medical school at Coimbatore was laid in September 1919. The new Medical school buildings at Tanjore were in course of construction. One hostel block at Rāyapuram intended to accommodate 36 pupils was almost completed. In addition to the continuation medical school at Madura, a mission medical school for women was opened at Vellore with a large grant from Government. As satisfactory arrangements could not be made for the opening of the final year class at Calicut, the passed third year pupils of the school were transferred to the Madura school for their final year's training. The design and lay-out plans for the proposed Government Medical School for Women in Madras were prepared and submitted for approval. The receipts and expenditure of the five medical schools amounted to Rs. 0·25 lakh and Rs. 2·15 lakhs, respectively, as against Rs. 0·14 lakh and Rs. 1·31 lakhs in the previous year.

THE PASTEUR INSTITUTE, COONOOR

(1ST MARCH 1918 TO 28TH FEBRUARY 1919)

[*The Annual Report of the Director of the Pasteur Institute of Southern India, Coonoor, etc.*, 1919]

244. The number of patients who went through a full course of treatment at the Pasteur Institute, Coonoor, rose further, by 579, to 2,975. The increase was entirely among Asiatics, Europeans being 112 fewer than in the previous year. The number of admissions would have been higher but for the widely spread epidemic of influenza and the difficulties of railway travelling, particularly on the Nilgiris. Four patients died during the course of treatment from hydrophobia, four died less than fifteen days from the date of completion of treatment and 22, fifteen or more days after the completion of treatment. The last are classed as failures, giving a rate of 0·74 per cent as against 0·79 per cent in the previous year. There were in addition 94 patients who, for various reasons, did not complete the full course of treatment. At the close of the year 109 patients, or two more than in the previous year, remained under treatment. Two hundred and sixty persons were given advice, but not treated as they were found to have run no risk of infection. The virus was in its 661st passage on February 28, 1919. The net receipts, excluding refunds of advances, amounted to Rs. 36,037 and the payments to Rs. 33,409. The expenditure during the year exceeded that of the previous year by Rs. 10,000. The excess was chiefly due to payments made to the Public Works department for the construction of six new rooms for indigent patients and the acquisition of 1·2 acres of land for the construction of quarters for the Assistant Surgeon and others.

LUNATIC ASYLUMS (1918)

[*G.O. No.* 279, *Local and Municipal* (*Medical*), *dated the* 22*nd May* 1919. *Statistics of British India, Vol. III, Public Health—Lunatic Asylums*]

245. There was accommodation during the year for 1,010 insanes, or 20 more than in 1917, the increase being due to the provision in Calicut of temporary buildings to meet the overcrowding on the male side during at least two months in the year, viz., September and October. The total population in all the three asylums (Madras, Calicut and Vizagapatam) at the end of the year rose from 845 to 896 and the daily average strength from 852 to 877, of which females numbered nearly a fourth. The year's admissions, including readmissions, numbered 366 as against 300 in 1917. There were no admissions or readmissions of voluntary boarders. There was a further falling off, from 39 to 36, in the number of criminal insanes admitted. Ten criminals were discharged to stand trial as against 33 in 1917. The daily average sick for the three asylums rose from 82 to 99, the increase being due to the exceptional unhealthiness of the year. There was for the same reason an increase in the total mortality from 77 to 119 and a fall from 15·49 to 13·57 in the percentage of cured to daily average strength. Dysentery was, as heretofore, a prominent cause of death, but tubercle also was in evidence, especially at Madras. Regular inspections of the asylums were made by both officials and non-officials. There was a slight increase in the receipts from paying patients which amounted to Rs. 20,975. Excluding remittance to the treasury and the value of stores on hand the total expenditure during the year amounted to Rs. 1·92 lakhs as against Rs. 2·01 lakhs in the previous year.

SANITATION (1918)

[*Annual Reports of the Sanitary Board, Sanitary Commissioner and Sanitary Engineer for* 1918]

Sanitary Board

246. The constitution of the Sanitary Board underwent no change during the year and its functions were confined to examining sanitary schemes, advising local bodies and Government on questions of sanitation and issuing standard type-plans and estimates for the guidance of local bodies. The Board issued during the year revised type-designs for quarters for sub-assistant surgeons, and civil apothecary or assistant surgeon, for slaughter-house intended for bullock or sheep and for scavengers' huts and also issued a new design for sullage drains in narrow lanes. It examined schemes estimated to cost Rs. 14·79 lakhs in the aggregate, of which 14 works estimated to cost Rs. 12·15 lakhs were for municipalities and three estimated to cost Rs. 2·64 lakhs were for local boards.

Sanitary Commissioner

247. During the year 27 municipal towns, or one more than in 1917, had the benefit of a piped water-supply system, while in other municipalities water-supply schemes were in various stages of progress. In the

Municipalities

remaining towns the chief sources of drinking water are wells, tanks and rivers and efforts were made in such cases to afford some simple means of protection against gross contamination. The periodical examination of municipal and jail water-supplies at the King Institute, which had been in abeyance pending the results of the experiments on the working of the new sand and mechanical filters, was resumed during the year. Similar examination will also be undertaken of water supplied to passengers at important railway stations, but for the present the scheme is restricted to certain specified stations only. As regards drainage, Ootacamund still remains the only mufassal municipality which has a drainage system with the necessary disposal works. The scheme for the employment of first and second class health officers in selected municipalities made no great headway. First-class officers were employed in Madura and Trichinopoly as in the previous year and second-class officers in Calicut, Cocanada, Tuticorin and Tanjore. The principle of employing health officers was extended during the year to the municipalities of Palghat, Vizagapatam, Kumbakōnam and Coimbatore, but in none of these have any appointments been made owing to the dearth of candidates or the unwillingness of medical graduates to accept municipal service. There was an all-round increase in the sanitary staffs and plant employed during the year, but many individual municipalities leave much to be desired in the matter of efficient conservancy. Municipal councils showed an increasing appreciation of the importance of providing suitable public latrine accommodation and the number of type-design and pakka built latrines rose from 841 to 1,176. The number of private latrines in towns rose from 153,805 to 158,836 and those conserved by municipal agency from 133,107 to 137,095. There was little change in the system of rubbish and nightsoil conservancy and municipal councils continued to evince little interest in the matter of sewage farming. The allotment for sanitation amounted to 40·5 per cent of the municipal income. The allotment and expenditure during the nine months ending with December 1918, for which information is available, amounted respectively to Rs. 29·88 lakhs and Rs. 20·85 lakhs, water-supply absorbing Rs. 3·92 lakhs. Two major water-supply works continued to be

District boards

under execution by district boards, 16 were under investigation and none were completed or opened. The provision of comprehensive drainage schemes in rural areas is a very remote contingency under existing conditions of finance. The proportion of unions and other villages in which conservancy establishments were maintained amounted to only 2·3 per cent of the total number of villages in the Presidency as against 2·5 per cent in the previous year and there was hardly any supervision. There is however a general awakening of interest in sanitation and it is hoped that a greater impetus will be given to it as a result of the informal

conference of Sanitary Commissioners held at Delhi and Simla in January 1918 and May 1919. The allotment and expenditure for sanitation for the nine months ending with December 1918 amounted respectively to Rs. 13·07 lakhs and Rs. 6·60 lakhs, the expenditure forming 50·5 per cent of the allotment. The allotment and expenditure on the improvement of water-supply were, respectively, Rs. 3·35 lakhs and Rs. 1·22 lakhs.

Sanitary Engineer

248. During the year the experimental urinal at Chepauk, improvements to the Mahamakham tank at Kumbakōnam and two water-supply schemes were under execution by the Sanitary Engineer. Seven water-supply and drainage schemes were drawn up by him and forwarded for sanction. Three water-supply and drainage schemes completed by the Deputy Sanitary Engineers were under scrutiny by the Sanitary Engineer and eight other schemes were under preparation by the former. Sixteen schemes were under investigation and preliminary reports on six others received from the Deputy Sanitary Engineers were under scrutiny during the year. Estimates aggregating Rs. 14·85 lakhs for 336 Minor sanitary works were received by the Sanitary Engineer. Of these 34, amounting to Rs. 0·27 lakh, were sanctioned by the Deputy Sanitary Engineers themselves, 152, amounting to Rs. 5·60 lakhs, by the Sanitary Engineer and five, amounting to Rs. 2·67 lakhs, were forwarded for the sanction of the Sanitary Board. The erection of pumping plant at nine stations was in progress under the surpervision of the Chief Inspector of Steam-boilers and Prime-movers.

VACCINATION (1918–19)

[*Annual Report on Vaccination in the Madras Presidency and on the work of the Vaccine Section of the King Institute of Preventive Medicine, Guindy, for the year* 1918–19; *Statistics of British India, Vol. III, Public Health—Vaccination*]

249. No changes were made in the manufacture of vaccine, the bulk of which was as usual made up with lanoline. Glycerinated lymph was, as in previous years, supplied to Madras City and to Colombo. The total number of vaccine operations performed was 1,633,833, or 73,450 less than in the previous year. The decrease occurred entirely under primary vaccination and was partly due to the prevalence of influenza during the second half of the year, for a greater part of which the work was practically at a standstill. There was an increase of 25,623 in revaccination cases which should be attributed to the greater prevalence of smallpox in 1918 and the consequent demand for revaccination. A regrettable decline occurred in the percentage of success both under primary vaccination and revaccination, the fall under the former being 5·5 per cent and under the latter 8·8 per cent. This was partly due to the transfer from Vaccinators to Deputy Inspectors of Vaccination of the duty of verifying results, thereby reducing the chances of over-valuing one's own work and ensuring greater accuracy and partly to the generally poor quality of the work turned out by the new vaccinators. Verification of vaccinated cases by Deputy Inspectors was, however, not satisfactory on the whole. There was a further fall of 122,981 in the number of children successfully vaccinated under one year of age. The total cost of the department rose from Rs. 3·46 lakhs to Rs. 4·05 lakhs and the average cost of each successful case from As. 4–3 to As. 6–1.

CHAPTER VII

INSTRUCTION

GENERAL SYSTEM OF PUBLIC INSTRUCTION

250. *Vide* pages 213 to 228 of the Report on the administration of the Madras Presidency for the year 1911–12.

EDUCATION (1918–19)

[*Report on Public Instruction in the Madras Presidency for the year* 1918–19 ; *Statistics of British India, Vol. V, Education*]

Administrative events of the year

251. The Ceded Districts College, Anantapur, was raised to the status of a first-grade college during the year and the Queen Mary's College for Women, Madras, was placed on a permanent footing. The Lady Ampthill Hindu Girls' School at Masulipatam was taken under departmental management and raised to the secondary grade. A Civil Engineering School was opened at Vizagapatam and an Institute of Commerce in Madras. A University Students' Club was started in January 1919 in which there were 109 members at the close of the academical year ending with 30th June. Among the important changes introduced during the year in the departmental Codes and Rules mention may be made of an increase sanctioned in the capitation grants to trained lower elementary, higher elementary and secondary grade teachers, in the rates of grants payable towards stipends to students under training in aided training schools and in the rate of stipend admissible to students from this Presidency deputed for training to the Government Training Class, Sanawar. Inspectors and Inspectresses were empowered to sanction furniture grants up to Rs. 200.

General statistics

252. The number of public institutions in the Presidency rose during the year, by 362, to 32,879 and their strength, by 3,350, to 1,583,100. The number of private institutions as well as the number of scholars in them continued to decrease. Taking both public and private institutions together there was an accession of 117 to their number and a fall of 3,600 in their strength. The percentage of those under instruction to the whole population continued to be 4·1, being 6·6 in the case of boys and 1·7 in the case of girls.

University and collegiate education

253. The committee of the Senate appointed in March 1918 to consider and report upon proposals relating to the appointment of lecturers in Dravidian languages and for the compilation of histories of literature in those languages did not view the first proposal with favour and passed a resolution recommending the preparation in English of histories of the literature of Dravidian languages and the collection and editing of old manuscripts in those languages. The Syndicate resolved not to recommend the continuance of the professorship of Comparative Philology on the expiry of the term of office of the present professor, but proposed the continuance of the professorship of Indian History and Archæology for another term of five years. Arrangements for the retention of the professorship of Indian Economics on a permanent basis were in

progress during the year. The classes for the University Diploma in Economics were opened on 1st August 1918, with 30 students, of whom 14 sat for the examination in April 1919 and 11 qualified for the diploma. "Some South Indian Villages," the first volume of the Economic series, "The Sources of Vijayanagar History," and "Dravidian Studies," Nos. 1 and 2, are the University publications of the year. Further affiliation in certain subjects was granted during the year to the Parlākimedi Raja's College, Cocanada, the Pachaiyappa's College, Madras, the Ceded Districts College, Anantapur, and the Women's Christian College, Madras. Besides, affiliation was newly granted in group iii of the Intermediate courses to the Madras Muhammadan College, the National College, Trichinopoly, and St. Thomas' College, Trichur. The Government also sanctioned disaffiliation in whole of four colleges and in group ii only of the Intermediate courses of three. The total number of Arts colleges remained the same as in the previous year and their strength fell, by 17, to 7,972. In first-grade colleges for men the strength increased, by 257, to 6,059, of whom 375 were undergoing Honours courses. The strength in second-grade colleges fell, by 287, to 1,705. There was no change in the number of Arts colleges for women but their strength rose, by 13, to 208. In the four professional colleges the strength rose from 1,755 to 1,932. Colleges

254. The number of public secondary schools for boys rose from 355 to 418. The total strength of the institutions for Indian boys rose, by 2,971, to 143,277, the percentage of increase being 2·1 as against 3·05 in the previous year. The number of teachers employed in these schools advanced by 550 or 9·4 per cent to 6,380. There was again a slight increase in the number of candidates who sat for the public examination under the Secondary School-Leaving Certificate scheme. The total direct expenditure on secondary schools for Indians increased, by Rs. 3 lakhs, to Rs. 42 lakhs, to which public funds contributed 13 per cent, fees 72 per cent and other sources 15 per cent as against 10, 76 and 14, respectively, in the previous year. The average cost of educating each pupil rose from Rs. 27–12–0 to Rs. 29–2–0, while the average fee paid (Rs. 21) remained the same as in the previous year. **Secondary education**

255. The number of public elementary schools for Indian boys rose, by 90 or 0·3 per cent, to 29,938, while the strength in them decreased, by 9,115 or 0·72 per cent, to 1,249,926. This decrease was confined to schools under private management. The percentage of male pupils to the male population was practically the same as in the preceding year, namely, 5·3. The policy of taking badly managed aided schools under public management was continued during the year. The total number of teachers employed in public schools increased, by 377 or by 0·7 per cent, to 51,280, while the number of trained teachers rose, by 343 or by 1·9 per cent, to 18,335. There was a slight increase from 35 to 36 in the percentage of trained teachers to the total number employed. During the year 586 buildings were constructed for the accommodation of elementary boys' schools. The total expenditure rose from Rs. 60·10 lakhs to Rs. 66 lakhs, towards which public funds contributed 74 per cent, fees 10 per cent and other sources 16 per cent, the corresponding percentages of the previous year being 73, 12, and 15, respectively. A lump sum of Rs. 8 lakhs was placed at the disposal of local bodies for the construction of elementary school buildings. The average cost per pupil rose from Rs. 4–11–3 to Rs. 5–9–0. **Elementary education**

256. The number of training schools for masters rose, by 4, to 66 and their strength, by 328, to 4,554. The number of training schools for mistresses remained the same as in the previous year, viz., 24, but the strength in them rose, by 91, to 925. The special training classes attached to certain colleges and secondary schools continued to work during the year. On the 31st March 1919, 4,699 students were receiving instruction of a technical character, of whom 1,351 were pursuing art education, 414 technical education in engineering subjects and telegraphy, 1,843 industrial education including agriculture and 1,091 commercial education. **Special education** Training schools Technical and industrial schools

Female education

257. The number of schools intended for Indian girls increased by 234. The total strength of these institutions and the total number of girls under instruction rose in each case by about 11,000, the former to 163,991 and the latter to 347,122. The strength of the three colleges for women rose from 195 to 208, of whom 103 were reading in the Queen Mary's College, Madras, and 96 in the Madras Christian College for Women. There were in addition 20 women students reading in colleges for men. The number of public secondary schools for girls rose, by 2, to 40 and their strength, by 100, to 8,100. Public elementary schools for girls rose by about 200 and their total strength by 8,400. In all elementary schools for girls 6,321 teachers were employed, of whom 59 per cent were trained as against 57 in the previous year. The expenditure on secondary and elementary schools for girls rose further from Rs. 14·5 lakhs to Rs. 16·8 lakhs, towards which public funds contributed 65 per cent and fees and other sources 35 per cent as against 63 and 37 per cent respectively in the preceding year.

European education

258. The total number of European institutions, including the two industrial schools under the control of the Director of Industries, rose, by one, to 92. The total strength increased, by 153, to 8,885 and the total number of teachers, by 14, to 675. Of the latter 501 held professional certificates as against 479 in the preceding year. One teacher from this Presidency was undergoing training in the Government Training class, Sanawar. More than 50 per cent of the candidates were successful in the European School examinations held in 1918, except in the case of boys in the Middle School examination and of girls in the Primary Scholarship examination, where the percentages were 43 and 42 respectively. As usual English accounted for the large majority of failures in the High School examinations. The total expenditure rose from Rs. 15·15 lakhs to Rs. 17·62 lakhs, towards which public funds contributed 40 per cent, fees 14 per cent and other sources 46 per cent, the corresponding percentages in the previous year being 37, 16 and 47.

Education of Muhammadans

259. The number of institutions chiefly intended for Muhammadans rose, by 195, to 2,906 and their strength, by 8,661, to 153,496. The Government Madrasa-i-Azam was raised to the status of a second-grade college during the year. The number of secondary schools increased from seven to nine and their strength from 1,565 to 1,651. As in the previous year public elementary schools for boys chiefly contributed to the general advance both in number and in strength. There was again a slight fall in the number of students in Arts colleges, while the number of Muhammadan pupils in secondary schools for Indians rose, by 139, to 7,582. Of the public schools intended for Muhammadans, 189, or 21 more than in the previous year, were elementary schools for girls, the strength of which increased, by 1,000, to 11,000. The number of training schools for masters rose from six to seven and the number of students under training therein from 277 to 294. The number of institutions intended for Mappillas increased, by 53, to 920 and there was a rise of about 2,500 in their strength. The expenditure on Muhammadan and Mappilla schools rose from Rs. 8·30 lakhs to 9·66 lakhs, towards which public funds contributed 72 per cent, fees 7 per cent and other sources 21 per cent, the corresponding percentages for the preceding year being 71, 8 and 21 respectively. Nearly the whole of the recurring Imperial grant of Rs. 30,000 was spent during the year.

Education of backward classes and others

Panchamas

260. The number of institutions chiefly intended for Panchamas rose, by 371, to 6,185, and there was an increase of nearly 4,500 in their strength. The total number of Panchama scholars in public schools in the different stages of instruction increased by 2,030. One of the most important incidents of the year in connexion with Panchama education was the issue by Government of an order facilitating the admission of Panchama children into schools under public management. The number of schools in the Ganjām, Vizagapatam and Gōdāvari districts chiefly intended for the hill tribes of the Agency tracts increased, by 22, to 289 and they were attended by 9,813 pupils or 1,122 more than in the previous year,

Aboriginal and Hill tribes

of whom the number of those belonging to the aboriginal classes rose, by 755, to 4,550. In the three Agencies the total number of aboriginal pupils in all classes of schools rose, by 844, to 6,127. Besides these institutions there were 13 schools exclusively working for the benefit of the Chentsu children in the Kurnool district, one mission aided school specially intended for Koravas in the Wynaad taluk of the Malabar district and 46 institutions chiefly intended for the education of the aboriginal and hill tribes of the Nilgiris. In the Presidency as a whole the total number of pupils belonging to the aboriginal classes was 8,755 (7,774 boys and 981 girls). The five institutions at Palamcottah, Madras, and Rentachintala intended for the blind and deaf mutes continued to do good work during the year. Blind and deaf mutes

261. The total expenditure on education rose from Rs. 226·5 lakhs to Rs. 248 lakhs, representing an increase of nearly 10 per cent as against 4 per cent in the previous year. To this increase public funds contributed 53 per cent and private funds 47 per cent as against 52 and 48, respectively, in the previous year. The total direct expenditure rose, by nearly Rs. 15 lakhs, to Rs. 172·4 lakhs and indirect expenditure, by nearly Rs. 7 lakhs, to Rs. 76 lakhs. The recurring Imperial assignments aggregating Rs. 21·70 lakhs which were available during the year were fully spent. A further recurring grant of Rs. 5·5 lakhs announced at the end of the year could not be fully utilized as the schemes for which they were intended were not mature. Only a sum of Rs. 1·6 lakhs was sanctioned as a recurring charge for opening additional elementary schools and the balance of nearly Rs. 4 lakhs was placed at the disposal of local bodies to meet the cost of constructing buildings for elementary schools. Out of the unspent balance of Rs. 12·8 lakhs available at the commencement of the year from the non-recurring assignment of Rs. 49 lakhs made in 1912–13 for education in general, a sum of Rs. 1·8 lakhs was utilized for building grants to European schools, for playgrounds and for certain Government educational buildings. Finance

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REFORMATORY SCHOOL, CHINGLEPUT (1918)

[*Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

262. The average strength of the Reformatory School, Chingleput, including 13 boys under licence, was 258 as against 249 in the previous year. The number of admissions rose from 57 to 74. The school is composed roughly of two-thirds Tamil boys and one-third Telugu. Of those admitted during the year 27 were habituals, of whom 18 had one previous conviction, 8 had two previous convictions, and 1 boy three previous convictions. The number of pupils from the criminal classes remained almost stationary at 37 which in a school population of 250 is too large a number. No pupils were admitted from the districts of Nellore, South Kanara, Anantapur, Guntūr and Rāmnād. The number of pupils from Madras decreased from 36 to 20. The number discharged in the ordinary course was 57. Two boys who were suffering from leprosy were discharged by order of Government. Prior to admission 179 juveniles, or 70 per cent, committed theft on account of parental neglect and the remaining 30 per cent committed serious offences pointing to hereditary criminal tendencies. The sanitation of the school and its precincts was carefully attended to, and in spite of all precautionary measures, there was an outbreak of cholera which necessitated the removal of the boys out in camp for thirteen days in April and two boys died. In October there was an outbreak of influenza and as the disease became prevalent the boys were kept in the open both day and night. The disease was kept under control by arrangements made for the segregation of convalescents. In spite of this, however, four boys died. In consequence of the outbreak

of this disease and of malaria the total admissions into the hospital rose from 317 to 454. There was a slight fall in the average number of pupils who gained weight, who lost weight and who remained stationary. The conduct of the boys was satisfactory throughout the year and the monitors behaved well on the whole. The award of marks for conduct in school and out of school with a money value attached to them helped the maintenance of discipline in some measure. There was no noticeable variation in the average annual earnings per pupil or in the total earnings for the year. Religious and moral instruction continued to be imparted in the school on the usual lines. Considerable attention was paid to physical training and recreation. In December 1918 the school went out to the Seven Pagodas in camp. Twenty-four pupils were examined for the Elementary School-leaving certificate, of whom eleven secured 'good' certificates and six secured 'fair'. Various industrial classes continued to do good work excepting the blacksmith class, which was in an unsatisfactory condition for lack of a qualified teacher. For the Government Technical examinations 29 candidates in all appeared, 18 for the Elementary and 11 for the Intermediate and 24, or 83 per cent, passed with seven in the first class and 17 in the second class. The supervision and after-care of discharged pupils received careful attention and Collectors of districts rendered every help to the boys in obtaining a fair start in life. There were 24 boys under licence, of whom 14 were discharged in the ordinary course. No boys were returned for misbehaviour. During the year 20 boys enlisted in the Army and 11 in the Military Labour Corps. Since the outbreak of the war, the number of enlistments amounted altogether to 65 combatants and 51 non-combatants. Deducting the sale proceeds, the net expenditure was Rs. 0·47 lakh against Rs. 0·41 lakh in the previous year.

MISCELLANEOUS (1918–19)

Government examinations

263. All the usual Government examinations were held during the year except the one for the recruitment of candidates for the Madras-Burma Sub-Assistant Surgeon grade. The special examination under the Secondary School-leaving Certificate Board for the benefit of teachers who failed in the Matriculation or the Upper Secondary examinations and were desirous of being admitted for secondary grade training was held at forty centres. Seventy-one candidates registered their names and 67 of them (including one woman) appeared. The total number of individual candidates registered for the three grades of technical examinations fell, by about 400, to 10,429. The total number of subject candidates examined was 12,496, of whom 5,672 were successful. The results were better than those of the previous year in the case of all three grades. Seven of the subject candidates for the advanced, 97 for the intermediate and 387 for the elementary grades were female candidates, of whom 6, 84 and 264, respectively, were successful. For the 100 vacancies thrown open to competition for the grade of Civil Medical pupil 420 candidates appeared, most of whom were holders of secondary school-leaving certificates. There were twenty vacancies for the grade of Indian Military pupil and 69 candidates applied for admission to the competitive examination for that grade. The scheme of the Special Test examinations underwent certain changes during the year. A person possessing a completed secondary school-leaving certificate could, under certain conditions, appear for examination in any of the special tests. The Précis-writing test was expunged from the schedule of special tests. The distinction between the higher and lower grades in the case of the Revenue and Criminal Judicial tests was abolished and they were replaced by a single test in each case. Candidates in any test could answer all the question papers with the aid of books. The examinations were held at twenty-four centres. For these tests 2,856 candidates in all registered

Special tests

their names, 1,977 presented themselves for examination and 1,128 passed. The percentage of passed candidates to those examined increased from 55·62 to 57·05. The receipts amounted to Rs. 1·99 lakhs and the expenditure to Rs. 1·80 lakhs. Finance

264. On the 31st December 1918 there were 467 pupils on the rolls of the Lawrence Memorial School, or 13 less than in the previous year, of whom 302 were boys as against 310 in 1917 and 165 were girls as against 170. Twenty-eight of these (17 boys and 11 girls) were day scholars as against 25 in the previous year (15 boys and 10 girls). There were 310 children awaiting admission (164 boys and 146 girls), of whom 245 are children of British officers and soldiers serving or having served in India. In the public examination of November 1917 the school did very well and won quite a number of scholarships. The Inspector of European and Training Schools inspected the institution in May 1918 and recorded the opinion that its general condition continued to be satisfactory, that much useful work was turned out and that the prevailing tone and discipline were very good. On the 6th September 1918, the school completed sixty years of its life. Influenza, of the type popularly known as the "Spanish Flue," broke out in October and a large number of boys and girls were attacked at the same time. The nursing staff stood the brunt of it all and were reaching the utmost stage of exhaustion when the ladies of Ootacamund formed a voluntary aid detachment and stepped in, thus averting a collapse. A junior cadet company was formed during the year in connexion with the 20th Nilgiri-Malabar Battalion, Indian Defence Force. Since the war the staff and pupils have raised Rs. 10,549 for war and relief funds and the girls in addition have made 5,009 articles, such as socks and shirts, for the soldiers at the front. Including the opening balance of the previous year the receipts amounted to a little over Rs. 3 lakhs and the expenditure to Rs. 2·22 lakhs. **Lawrence Memorial School (1918)** Finance

265. The number of pupils on the rolls of the Madras School of Arts on the 31st March 1919 was 272, or 31 less than in the previous year, of whom 20 were females. The average attendance during the year was 179. The drop in numbers was due to illness which prevailed to an unusual extent. There was a further gratifying increase from 45·3 to 51·1 in the percentage of artisan pupils. The number of scholarships tenable was the same as in the previous year. The carpet weaving department showed considerable progress, as sufficient quantity of wool became available owing to the cessation of war. The other departments also worked satisfactorily. The continued success of the ex-pupils of the Reformatory School, Chingleput, who had gone through their apprenticeship in the institution was gratifying. Seventy-three new books were added to the library which contained 1,647 volumes at the end of the year. The museum was maintained as usual. Of the 228 pupils who went up for the technical examinations, 160 were successful. **School of Arts, Madras**

LITERARY SOCIETIES

266. *Vide* pages 239 to 241 of the Report on the administration of the Madras Presidency for the year 1911–12.

LITERATURE AND THE PRESS (1918–19)

[*Statistics of British India, Vol. IV, Administrative, etc.—Press and Publications*]

267. There was a fall, by 3,328, to 19,454 in the number of readers at the Connemara Public Library which was due to the long prevailing influenza epidemic. Four hundred and nineteen standard works, or 231 less than in the previous year, were added to the library, of which 344 **Public Libraries** Connemara Public Library

were acquired by purchase and the rest presented. As usual dictionaries, encyclopædias and gazetteers, belles-lettres and works on history were in greatest request. At the University Library there was a further rise, by 176, to 10,400 and, by 1,419, to 15,522, respectively, in the total number of readers and the volumes consulted by them. There was a further rise also in the number of readers who claimed the privilege of taking books on loan against a deposit of Rs. 20 and in the number of volumes consulted by them, the figures being 211 and 4,893 as against 173 and 4,053 in the previous year. The subject index of the books in the library was in course of preparation. There was a fall, by 234, to 445 in the number of manuscripts acquired for the Oriental Manuscripts Library during the year. This was due partly to the unwillingness of owners in the districts of Ganjām and Malabar and in Cochin to sell or to give in presentation their manuscripts and partly to the increased cost of transcription and the comparison of most of the transcribed manuscripts. Of the year's accessions, manuscripts bearing on religion, poetry, philosophy and science were the largest in number and these were mostly the subjects on which the attention of visitors was centred. The number of visitors to the library fell from 2,212 to 1,753 and the number of works consulted from 4,517 to 3,494.

University Library

The Oriental Manuscripts Library

The Madras Record Office

268. The Madras Record Office, which was constituted as a separate department in 1909, is the repository of all Government Secretariat records except those of the last seven years; the records of the Board of Revenue comprising those of the Land Revenue department from 1786 to 1888; of the Settlement department from 1887 to 1898 and of Miscellaneous Survey records, including maps; the Collectorate records of all districts up to 1820; the High Court records including those of the Mayor's Court from 1689 to 1798; Dutch records from 1657 to 1823; Danish records from 1777 to 1845 and also of Gazettes, Almanacs, Civil and Army lists. Catalogues pertaining to these items have been issued in eleven volumes. Carnatic records in Persian up to 1860 and old Army records are also preserved. The publications issued by the Record Office during the past decade are: Report on the Madras Records by H. Dodwell; Reprints (and selections) from the Ancient Government Records of the 17th, 18th and the early 19th centuries, comprising Consultations, Despatches, Letter Books, etc., 66 volumes; Reprints of the Baramahal Records of the Board of Revenue, 6 volumes; Translation of the Diary of Ananda Ranga Pillai, Dubash of Dupleix, 1736 to 1748, six volumes (three edited by Sir F. Price); and Calendar of the Madras Records, 1740–44.

Periodicals (1918)

269. At the end of 1918 there were 199 newspapers in existence as against 217 at the close of the previous year. The circulation of *New India* fell from 10,000 to 9,000 owing to its prohibition in the Punjab and Burma, but it still kept ahead of the English papers. Next came the *Hindu*, the circulation of which rose from 6,400 to 7,200. *Justice*, the non-Brahman anti-Home Rule paper, declined from 3,000 to 2,000. The tone of the press during the year showed no signs of improvement. The Reform Scheme and the report of the Rowlatt Commission were two main topics of controversy, and many violent and acrimonious articles appeared on these subjects. One printing press did not open owing to the demand of security. For a similar reason three printing presses were closed as against five in the previous year, and two newspapers, or the same number as in 1917, ceased publication. Three books and three leaflets were proscribed under section 12 of the Indian Press Act, 1910, as against three publications in the previous year. The prosecution of a printer, sanctioned by Government during the year under section 16 of the Press and Registration of Books Act, 1867, was pending at its close.

Registration of books (1918)

270. Owing to the continued prevalence of war conditions and the high price of paper there was a drop in the literary output of the year, both under books and periodicals, the former falling by 230 to 2,400 and the latter by 50 to 1,857. There was a considerable increase in English publications and a corresponding fall in others, chiefly those in the

vernaculars. As usual the largest number of publications issued was in Tamil and there was a striking fall of 19 per cent in the total number of Telugu publications; but the literary activity in the latter tongue was of a more solid kind than that in the Southern vernacular. The largest number of publications, representing two-fifths of the total output, continued to treat of religion and philosophy. There was an increase not altogether unexpected, from 64 to 93, in publications of a political nature. Very few of the productions under these heads deserve special mention. In science (mathematical and natural) as well as in the total number of publications of an educational nature there was a further fall. Owing presumably to the disturbed economic and political conditions of the year there were no productions of note under poetry, language, art and drama, and it may be some time before the literary activity of the Presidency emerges from this depression. There were however two noteworthy publications in Telugu, one historical and the other biographical. The former, which is entitled "Karna Samrajyamu" or "The Empire of Karna," treats of the rivalry between Karna, a powerful Andhra monarch of the second century who ruled over a vast empire in Southern India, and Nahaphana, ruler of a neighbouring kingdom called Kohatrapa. The Andhra king maintained his position and eventually came out successful. As a historical novel, the work may be regarded as a model in a new line in the field of Telugu literature, but the story is rather too heavy and complicated to sustain the interest of the reader. The other work, entitled "Srinadhakavi," treats of the life and writings of Srinadha, one of the most famous Telugu poets who flourished in the 15th century A.D. The author has chalked out a new path in the field of Telugu literature and exhibits considerable literary culture and critical faculty. The work may be said to belong to that class of composition corresponding to the "Men of Letters" series in English literature. The moral tone of the publications registered during the year was on the whole satisfactory.

ARTS AND SCIENCES (1918-19)

271. There was a further fall, by 114,600, to 512,290 in the number of visitors to the Museum during the year, which was mainly due to a decrease in the influx of mufassal visitors to the city by reason of the influenza scare. The extensions to the south wing of the new building were finished during the year and the re-arrangement of the ethnological exhibits and the collection of arms was taken in hand and completed. The Lecture Theatre behind the Oriental Manuscripts Library was refloored and additional accommodation was provided for the library by the removal of the platform and the benches. The demonstrations to high school pupils in Madras city were continued from December to March, but there was a further fall from 1,702 to 1,590 in the total number of pupils who attended them. As in previous years, the Superintendent gave a series of demonstrations to teachers in Madras schools. Ten were held during the year as against nine in 1917-18, but the attendance fell from 179 to 167. Special demonstrations were also given by the Superintendent to the pupils of the Presidency Training School for Mistresses and to the students of the University Professor of Indian Economics. In January 1919 the Superintendent delivered a popular lecture, illustrated with lantern slides, on some of the Natural History exhibits. The lecture was well attended. A catalogue of the copper-plate grants in the Museum was published during the year. Among the collection of arms arranged and labelled in the extension to the new building are two old swords and a battle-axe received from the Zamindar of Punganūr in the Chittoor district, the former of which are said to have been presented to the donor's ancestors by one of the Nizams of Hyderabad. The collection of South Indian brass-ware and wood-carvings was augmented by several new purchases. Mr. A. Foucher, the distinguished French Orientalist,

Government Museum

Visitors

Buildings

Demonstrations

Archæology and art

Economic and botanical

visited the Museum during the year and spent some time in studying the antiquities there. Several old interesting coins were acquired for the Museum under the provisions of the Indian Treasure Trove Act. The Herbarium-keeper made two tours during the year, one to Travancore in June and the other to the Chittoor district in January. Both resulted in numerous additions to the economic and botanical sections. A tour was made by the Zoological Assistant to the Tanjore district in June.

Marine Aquarium

272. There was a further fall both in the number of visitors to the Aquarium and in the entrance fees realized, the figures being 82,884 and Rs. 3,005, respectively, as against 90,535 and Rs. 3,231 in 1917–18. The institution will in future be in charge of the Director of Fisheries.

Meteorology

273. The chief work of the Madras Meteorological Office was as usual the publication of the Madras daily weather report and of the Presidency rainfall statistics. The number of observatories was the same as in the previous year, viz., 25. The observatory at Waltair was transferred to the St. Aloysius' School, Vizagapatam, in August 1918, so that it might be nearer the Port Office and more under the control of the Port Officer who is the Superintendent of the Observatory. The observatories at Kurnool, Cuddapah and Waltair including Vizagapatam were inspected during the year by the Inspector of Observatories. The usual annual repairs were executed at Amini Divi, Calicut, Cochin, Guntūr, Mangalore, Mercara, Nellore, Ootacamund and Vellore and some special repairs at Nellore and Cuddalore. The Madras daily weather report was issued to 52 Government and other officials in Madras, 91 in the mufassal and 16 paying subscribers. During the year three rain-gauge stations were transferred from the Trichinopoly to the Salem district, and in the Kurnool district the rain-gauge at Kalwa was removed to Vorvakal. No new stations were added and no stations were closed. Excluding meteorological stations, there were 495 rain-recording stations furnishing rainfall returns for publication in the *Fort St. George Gazette*. Of these 394 are in the Madras Presidency, of which no less than 383, or nearly, 97 per cent were inspected. The total cost of the Meteorological department was Rs. 13,403 as against Rs. 13,187 in the preceding year, of which a sum of Rs. 3,642, the same as in 1917–18, was spent on mufassal stations and the balance on the Madras Office.

Astronomy (1918)

Kodaikānal Observatory

274. At Kodaikānal the record of solar activity was maintained as in former years. Spectroheliograms of the sun's disc in calcium light were obtained on 337 days and of prominences at the limb on 249 days. Photographs of the disc in hydrogen light were secured on 261 days and direct solar photographs on a scale of 8 inches to the diameter on 303 days. The sunspot records show that the maximum activity of the present cycle took place during the second half of 1917, the number of spots decreasing during 1918, especially in the sun's northern hemisphere. The mean latitude of the spots was 2° less than in 1917. The prominence areas and numbers decreased rapidly during the year. The large grating spectrograph was employed in photographing solar and arc spectra, and the research on the displacements of the solar lines with reference to the lines in terrestrial spectra was continued. A series of spectra of sunlight reflected by the planet Venus was obtained during the year and these yielded most interesting results, revealing the condition of the sun on the side hidden from direct observation. A new spectrograph was constructed for work on the new star which appeared suddenly on 8th June, and a very successful series of spectra was secured before the star had faded to the fourth magnitude. The results of this work have been communicated to the Royal Astronomical Society. A continuous registration of earthquake disturbances was made with a Milne seismograph and 127 earthquakes were recorded during the year. The photographic records and absolute eye observations were continued in the Magnetic Observatory as in former years. There were 23 "Great" and 136 "Moderate magnetic storms registered during the year. The records are made over to the Magnetic Survey Office, Dehra Dun, and the results are published by

Madras Observatory

the Survey. At Madras the only astronomical observations made are those for the maintenance of an accurate time service for the whole of India. The time gun at Fort St. George failed on 27 occasions out of 730, giving a percentage of success of 96. Of these failures three were due to faults at the Observatory. The time ball at the Harbour failed altogether on eight days. On four of these days the releasing apparatus at the Harbour was out of order and on two other days the lines were interrupted. None of these failures was due to faults at the Observatory. On twelve other days the time ball failed at 1 p.m., but dropped correctly at 2 p.m. Most of these partial failures were found to be due to the fact that the line was interrupted at the Central Telegraph Office at 1 p.m. by some one who did not know that it was required at that hour for another purpose. The 4 p.m. roll of signals was sent to the Central Telegraph Office on every day and was received there correctly except on five occasions when the diffuser had not been joined on.

CHAPTER VIII

ARCHÆOLOGY AND EPIGRAPHY (1918–19)

[*Annual report of the Archæological Department, Southern Circle, Madras, for the year* 1918–19 *(G.O. No.* 1090, *Home (Education), dated the* 9*th September* 1918*). Progress report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year* 1918–19 *(G.O. No.* 1003, *Home (Education), dated the* 16*th August* 1919*)*]

Archæology

275. The Superintendent was absent on three months' leave owing to ill-health and since his return to duty was fully occupied with inspection. No time was therefore again found for excavation work. He spent 98 days in camp, a falling off from the average (137) for the past four years, and visited only nine districts. This was due partly to his having been on leave and partly to his having been engaged, at the instance of the Director-General of Archæology, in the publication of a work on South Indian Architecture. The improvements to the roads and pathways to the monuments at Gingee, Hampi and the Seven Pagodas were nearing completion, and the construction of a new road to the Shore temple at the Seven Pagodas and another to the Vittala temple at Hampi were under contemplation. The album of photographs placed in the previous year in the rest-houses at these places has been the means of increasing the sale of photographs of the famous groups of ancient monuments there. Altogether 21 applications were received and 190 photographs sold. The repairs which were in progress in the previous year to some of the chief buildings at Gingee, the Buddhist remains at Guntapalle, the Narasimha temple at Vinukonda, the Penukonda Fort, the Jaina temple at Danavalapad, the Gooty Fort, the Arsenal in Tanjore Palace and the Wandiwash Fort were all completed. Repairs to the Hill Fort at Udayagiri in the Nellore district were in progress; also special repairs intended to preserve the two famous palaces at Chandragiri in the Chittoor district. An instructive article, illustrated by drawings and photographs, was published during the year on the history of Pallava architecture, the earliest Hindu architecture found in Southern India. This will form part of the contemplated hand-book on "South Indian Architecture." Eighty photo negatives were prepared during the year illustrative of ancient architecture, art and antiquities. Nine cases of treasure trove, consisting of metal and stone images were referred for opinion and eight of the finds were recommended for acquisition for the Madras Museum. Twelve new monuments were added to the standard list of ancient monuments, four were declared as protected monuments and two were deleted from the list. Out of the usual allotment of Rs. 25,000 a total sum of Rs. 19,887 was spent on conservation as against Rs. 22,626 in the previous year. The establishment charges amounted to Rs. 19,471.

Epigraphy

276. The Assistant Superintendent was on three months' leave during the year. The villagewar inspection of the Tenkāsi taluk in the Tinnevelly district, which was commenced in the previous year, was completed. All the places in the Shiyali taluk, Tanjore district, and the Harpanahalli taluk, Bellary district, were surveyed, and almost the whole of the programme put down for the year was worked out. In all 398 villages were visited and 900 fresh inscriptions, the highest on record, were secured, besides 12 copper plates which were also examined. A special staff was sanctioned during the year, as a temporary measure,

for the systematic and expeditious publication of the transcripts of a large number of inscriptions which had accumulated without being edited or otherwise dealt with. It started work in August 1918 and during the nine months that followed 2,121 folio pages of manuscript containing the texts of 1,176 inscriptions were sent to press. The final proof of *South Indian Inscriptions*, Volume III, Part III, with plates covering 190 printed pages, was revised. As usual, the inscriptions copied represent the several ancient dynasties which held sway in Southern India. Among the fresh information disclosed by these transcripts may be noted the mention of a Chola king named Gandaraditya with the surname Mummadi Chola; the ancient custom of summoning the village assembly by a trumpet call; provision made for Vedic study; organized inquiry into the management of temples; reduction of rents due by cultivators on temple lands and the abatement of taxes thereon; reward granted for a work called the *Kulottungasolan-charitai*, which does not find mention in any available lists of Tamil literary compositions; and the discovery of inscriptions of the Gajapati Chief Kapileswara in the South Arcot district, which confirm the fact of the invasion of Southern India by the Orissa king. As a result of his epigraphical tours the Assistant Superintendent made a number of suggestions for the inclusion of certain temples in the list of conserved monuments and for the repair of certain others already in the list. He also brought to notice the existence of extensive Buddhist remains near Salihundam in the Vizagapatam district and the advisability of excavating them. The Superintendent, Archæological Survey, was considering these suggestions. The Assistant Superintendent also brought to notice the desirability of acquiring certain slabs and images in the store room of the Draksharama temple. This question was under consideration by the Superintendent of the Government Museum. The "Topographical List of the Inscriptions of the Madras Presidency," prepared by Mr. V. Ranga Achariyar, Professor in the Anantapur College, was published during the year. It forms a valuable contribution to the study of South Indian History and the author was awarded an honorarium of Rs. 1,000 by the Government of India for his labours. A curious event of the year was the discovery by the Archæological Superintendent of Burma of certain Telaing inscriptions, which formed the subject of study by the Assistant Superintendent for Epigraphy in Madras. These contained astounding statements intimately connecting Kyanzittha, King of Pagan, with Rajendrachola Kulottunga I, the Chola King of Tanjore, who is said to have resided at Pegu or Kadaram, to have visited Pagan bearing tributes to Kyanzittha, to have presented his daughter to the latter, and to have become a convert to Buddhism himself. None of these statements could however be corroborated. The expenditure of the department during the year amounted to Rs. 26,952.

CHAPTER IX

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

277. *Vide* pages 244 to 246 of the Report on the administration of the Madras Presidency for the year 1911–12.

ECCLESIASTICAL (1918–19)

Church of England

278. On the 31st March 1919 there were in all 289 clerks in Holy Orders officiating under the licence of the Bishop of Madras, including 121 who were officiating in the revenue districts of Tinnevelly and Madura, which are under the episcopal charge of the Bishop in Tinnevelly and Madura. Six chaplains were granted leave out of India and the vacancy caused by the death of a senior chaplain at the beginning of the year was not filled up. Four chaplains and one Indian clergyman were absent from the diocese on active service in Mesopotamia. One of the temporary chaplains appointed by the Government of India was on probation on the Madras Establishment at the end of the year. In consequence of the resignation of the late Most Reverend George Alfred Lefroy, D.D., of the office of the Lord Bishop of Calcutta and Metropolitan of the Province of India and Ceylon, the Bishop of Madras was appointed, with effect from the 1st January 1919, to exercise episcopal jurisdiction and functions relating to the see of Calcutta and the Metropolital office. From January 14th to March 31st he was in the diocese of Calcutta and on tour as Acting Metropolitan. During the year the Bishop in Tinnevelly and Madura ordained four Indian deacons and seven Indian priests, while the Bishop of Dornakal ordained on behalf of the Bishop of Madras eight deacons and three priests all of whom were Indians. Eight clergymen received licences to officiate in the diocese of Madras, one as chaplain and seven as Indian pastors. Four licences were issued by the Bishop in Tinnevelly and Madura. No churches, or cemeteries were consecrated. The Bishop visited Coonoor, Wellington, Ootacamund, Kotagiri and Aruvankadu in May, June and July; Bangalore in April and again in July and also in November; Kolar Gold Field in July; Cuddalore, Pondicherry and Villupuram in October; and Waltair and Vizagapatam in November. Besides the above tours the Bishop was summoned in April 1918 by the late Most Reverend the Metropolitan to Simla to have an interview with His Excellency the Commander-in-Chief. Alms and other devotions of the people offered through clergymen ministering to English congregations during the year amounted to Rs. 1·89 lakhs exclusive of those of the Civil Orphan Asylum Chapel, Madras, Chittoor, Mercara, Mysore and Pondicherry, for which stations no information is available.

Voluntary contributions

Church of Scotland

279. The establishment of the Church of Scotland consisted of three chaplains as in the previous year.

STATIONERY (1918–19)

Stationery

280. The value of the stock with the Superintendent of Stationery at the beginning of the year 1918–19 was Rs. 10·59 lakhs (English stores Rs. 4·93 lakhs and Indian stores Rs. 5·66 lakhs) as against Rs. 7·17 lakhs (English stores Rs. 4·48 lakhs and Indian stores Rs. 2·69 lakhs) in 1917–18. The increase was due to the large rise in the price of articles both of European and Indian manufacture. The total value of stores received during the year amounted to Rs. 13·79 lakhs (English stores Rs. 3·07 lakhs and Indian stores Rs. 10·71 lakhs) as against Rs. 13·22 lakhs (English stores Rs. 3·61 lakhs and Indian stores Rs. 9·61 lakhs) in 1917–18. The total value of issues amounted to Rs. 9·08 lakhs (English stores Rs. 2·66 lakhs and Indian stores Rs. 6·42 lakhs) as against Rs. 9·8 lakhs (English stores Rs. 3·17 lakhs and Indian stores Rs. 6·63 lakhs) in 1917–18. The value of stationery debited to Local and other funds and of stationery issued on payment amounted to Rs. 0·39 lakh as against Rs. 0·28 lakh in 1917–18. The value of the closing balance of stores for the year was Rs. 15·3 lakhs (English stores Rs. 5·34 lakhs and Indian stores Rs. 9·96 lakhs) as against Rs. 10·6 lakhs (English stores Rs. 4·93 lakhs and Indian stores Rs. 5·66 lakhs) in 1917–18. The increase is explained by the increase under stock on hand at the beginning of the year.

THE GOVERNMENT PRESS (1918–19)

Finance

281. The net receipts exceeded those of the previous year by Rs. 0·24 lakh due chiefly to the recoveries on account of "Chargeable work" and sale-proceeds of district press materials. The total expenditure was Rs. 4·22 lakhs as against Rs. 4·35 lakhs in the previous year, a decrease of Rs. 0·13 lakh due to smaller purchases of plant and stores during the year.

Publications

282. The sales of Acts and books amounted to Rs. 0·54 lakh as against Rs. 0·49 lakh in the previous year, while the sales by the agents amounted to Rs. 7,020. Acts and books to the value of Rs. 0·47 lakh were issued free as against Rs. 0·53 lakh in the previous year; the decrease was due to the revision of the distribution lists.

Printing and binding

283. The number of standard pages printed during the year was 200,555 as against 242,597 in the previous year, while the average cost per page in the Madras presses was Rs. 1–6–1 as against Rs. 1–1–7. The number of impressions was 90,176,059 as against 99,825,740 in 1917–18. The cost per 1,000 impressions in the Madras presses was Rs. 1–1–3 as against As. 14–9. The total debit against binding for all the presses amounted to Rs. 0·98 lakh, showing an increase of nearly Rs. 6,400 due chiefly to the rise in the cost of materials.

Miscellaneous

284. The additions to plant cost Rs. 0·51 lakh. The output of type foundry was 39,617 lb. of type, 9,396 lb. of stereo and electro, 65 punches and 177 matrices, while the expenditure was Rs. 0·39 lakh as against Rs. 0·40 lakh in the previous year. Type and other materials to the value of Rs. 4,008 were supplied to district and jail presses as against Rs. 609 in 1917–18, the increase being due to higher prices paid for materials and to a larger demand from the jail press at Vellore. The number of standardized and non-standardized forms despatched during the year was 94 millions as against 110 millions in 1917–18.

THE CHEMICAL EXAMINER'S DEPARTMENT (1918)

[*G.O. No.* 254, *Local and Municipal (Medical), dated the 9th May* 1919; *Statistics of British India, Vol. IV, Administrative, etc.—Medico-legal investigations*]

Medico-legal investigations

Poisoning

Stains

General analyses

285. The total number of cases examined by the Chemical Examiner during 1918 was 1,413 as against 2,154 in the previous year. Of these 155 were cases of suspected human poisoning as against 211 in the previous year, while cases of animal poisoning remained the same (78) as in 1917; 258 cases related to stains and 24 to miscellaneous medico-legal cases. The remaining 898 cases were general analyses and other work for various Government departments, municipalities and private parties. Poison was detected in 43·2 per cent of the cases of suspected human poisoning and in 62·8 per cent of the cases of suspected animal poisoning as against 41·2 and 61·5 per cent, respectively, in the previous year. Of the 258 cases of suspected stains, blood and seminal stains were detected in 205 cases and 17 out of 24 cases were detected in the miscellaneous medico-legal section. The percentage of detections was 79·4 as against 73·3 in the previous year. Of the 510 specimens of stains, concerned in 183 cases, sent to the Imperial Serologist, Calcutta, 466 were found to contain human blood, nine the blood of sheep or goat, two the blood of ox or buffalo and one non-mammalian blood. In 16 specimens no definite results were obtained as the stains were much disintegrated or decomposed and in the remaining 16 no blood was detected. The principal inorganic poisons used were compounds of arsenic and mercury, while the principal organic poisons were aconite, atropine, calotropis gigantea, cerbera thevetia, morphine, nerium odorum, gloriosa superba, and strychnine. The total number of articles examined was 898 as against 1,565 in the previous year, the number of analyses undertaken for private parties being 98 as against 129 in 1917. The principal miscellaneous articles examined were castor oil, dyestuffs, explosives, groundnut oil, liquid fuel, matches, paints and turpentine for the Customs department; brown sugar, flour, ghee and oils for the Commissariat department; and explosives, water, lime stone, stomach washings, coconut oil, pharmaceutical preparations, ink powders, ghee and indigo for various Government departments, municipalities and private parties.

CHARITABLE INSTITUTIONS (1918-19)

General statistics

286. Excluding dispensaries, there were during the year 3,104 charitable institutions in the Presidency, with an income of Rs. 14·45 lakhs, 67 garces of paddy and 320 muras of rice. Of these institutions 2,146 were maintained entirely by subscriptions and donations from the general public and by endowments in land and money, the total receipts from all these sources amounting to Rs. 7·28 lakhs. The Government maintained 275 institutions at a cost of Rs. 1·66 lakhs; 94 were supported, partly by Government and partly by the public, at a cost of Rs. 2·22 lakhs; and the maintenance of the remaining 589 institutions, costing about Rs. 3·28 lakhs, devolved wholly or in part on local bodies. The funds of the institutions were devoted to various objects. In all 1,942 institutions were intended to provide travellers with accommodation, cooked food, and other necessaries. Of these 1,146 were exclusively for Hindus, 47 for Muhammadans and one for Europeans and Eurasians; the remaining 748 were not intended for any particular class. For the relief of paupers 436 institutions were maintained, of which 220 were restricted to Hindus, 36 to Muhammadans and two to Europeans and Eurasians; the remaining 178 were open to members of all classes and creeds. There were 628 institutions exclusively devoted to giving help to Brahmanas and Byragis. There were also five institutions for orphans, three for Rajput boys and girls and four for the support of the blind, the deaf and lepers. The

total number of persons aided during the year at all the above charitable institutions was 11,797,405, or 106,176 more than in the previous year. The average daily number of inmates in the Monegar Choultry was 60·80 as against 59·91 in the previous year and the daily average cost of diet per pauper was As. 3–2 against As. 2–8. In the chronic wards the average daily number was 29·34 against 27·99 and the average cost of a diet was As. 5 against As. 4–10. The balance to the credit of the charity on the 31st March 1919 was Rs. 3,886. The daily average number of in-door paupers in the Raja of Venkatagiri's Choultry was 9·82 and of out-door paupers (receiving $\frac{1}{4}$ measure or $\frac{3}{4}$ lb. of raw rice daily) was 98·42. The corresponding figures for the previous year were 10·32 and 102. The daily average cost of diet of an in-door pauper was As. 3–4 and of an out-door pauper As. 1–1 as against As. 2–9 and 10 pies in the previous year. On the 31st March 1919 this institution had a balance of Rs. 424. The receipts of the Triplicane Langarkhana, including an opening balance of Rs. 496-3-5, amounted to Rs. 5,545–14–5. The daily average number of paupers who received help from the institution was 176, or 8 less than in the preceding year.

Monegar Choultry

The Raja of Venkatagiri's Choultry

Triplicane Langarkhana

MUHAMMADANS IN THE SERVICE OF GOVERNMENT (1918–19)

287. There were 7,939 Muhammadans in the superior service of Government on the 1st April 1919, or 128 less than in the previous year. The number admitted into the service during the year, excluding those who enlisted as police constables (557), was 40, of whom 11 entered the Registration department as clerks and 10 the Police department as sub-inspectors and head constables. Fourteen persons held posts with an annual salary of Rs. 5,000 and above, 44 were in receipt of salaries ranging from Rs. 2,500 to Rs. 5,000, 99 from Rs. 1,000 to Rs. 2,500, 210 from Rs. 500 to Rs. 1,000 and 510 from Rs. 250 to Rs. 500. The number earning from Rs. 120 to Rs. 250 rose from 6,999 to 7,057 and five drew Rs. 120 and less as against 15 in the previous year. There were 6,427 Muhammadans employed in the Police department, 431 in Courts of Law, 269 in the Land Revenue, 237 in the Education, 136 in the Forest, and 124 in the Registration departments. Other departments employed less than a hundred in each. The percentage of Muhammadans to the total population of the Presidency was only 6·6, but 13·46 per cent of the posts in the superior service were held by them.

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REPORT

ON THE

ADMINISTRATION

OF THE

MADRAS PRESIDENCY

FOR THE YEAR

1919-20

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CONTENTS

PAGE

PREFATORY NOTE ... vii

PART I

GENERAL SUMMARY ... ix

PART II

THE REPORT

CHAPTER I—PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PARA. PAGE

1 Physical features of the country, area, climate and chief staples ... 1

POLITICAL

PARAS. PAGE

2 Historical summary ... 1

3 Form of administration ... 1

4 Character of land tenures ... 1

5 System of survey ... 1

6 System of settlements ... 1

7 Civil divisions of the British territory ... 2

8 Details of the census of 1911—tribes and languages ... 2

9 **Changes in the Administration** ... 2

10 **His Excellency the Governor's Tours** ... 2

Relations with Tributary States

TRAVANCORE STATE

11 General ... 4
12 Revenue and finance ... 4
13 Protection and legislation ... 4
14 Production and distribution ... 5
15 Vital statistics and medical services ... 5
16 Education ... 5

COCHIN STATE

17 General and political ... 6
18 Revenue and finance ... 6
19 Protection and legislation ... 6
20 Production and distribution ... 7
21 Vital statistics and medical services ... 7
22 Education ... 7

PUDUKKOTTAI STATE

23 General and political ... 8
24 Revenue and finance ... 8
25 Production and distribution ... 8
26 Protection and legislation ... 8
27 Vital statistics and medical services ... 9
28 Education ... 9

BANGANAPALLE STATE

29 General and political ... 9
30 Revenue and finance ... 9
31 Protection and legislation ... 9
32 Vital statistics and medical services ... 10
33 Education ... 10

SANDUR STATE

34 General and political ... 10
35 Revenue and finance ... 10
36 Protection ... 10
37 Production and distribution ... 10
38 Vital statistics and medical services ... 11
39 Education ... 11

40 **Condition of the People** ... 11

41 **Political Pensions** ... 12

CHAPTER II—ADMINISTRATION OF THE LAND

Realization of land revenue

PARAS.		PAGE
42	Sources of land revenue	13
43	Collections	13
44	Coercive processes	13
45	Transfer of registration	14
46	Loans and advances	14

Surveys

47	Operations	14
48	Parties	14
49	Central Office	15
50	Outturn	15
51	Finance	15

Settlements

52	Parties	16
53	Districts	16
54	Registers	17
55	Finance	17

Land records

PARAS.		PAGE
56	General	18
57	Maintenance	18
58	Training of staff	18
59	**Waste lands**	18
60	**Government estates**	18

Wards' estates

61	Estates under management	18
62	Finance	19
63	Works	19
64	Debts	19
65	Miscellaneous	20

Revenue and rent-paying classes

66	Revenue-paying classes	20
67	Rent-paying classes	20

CHAPTER III—PROTECTION

68	**Legislating authority**	21

Course of legislation

69	Legislative Council	21
70	Acts and Bills	21
71	Government of India	22

Police

72	Administrative changes	22
73	The police force	22
74	Village police	23
75	Armed reserves	24
76	Railway police	24
77	Statistics of crime	24
78	Detection and prevention of crime	25
79	Criminal Investigation Department	26
80	Finance	26

Criminal justice

81	General	27
82	Original cases	27
83	Appeals	27
84	Reference and revision	28
85	The jury system	28
86	Miscellaneous	28

Prisons

87	Accommodation	29
88	Prisoners of all classes	29
89	Convicts	29
90	Conduct	30
91	Vital statistics	30
92	Finance	31

Civil justice

93	General	31
94	Litigation	31
95	Courts of original jurisdiction	32
96	Appellate courts	33
97	Insolvency	33
98	Miscellaneous	33
99	Finance	33

Registration and companies

100	Registration	34
101	Registered companies	35
102	Notaries Public	36

Co-operative Societies

103	General	37
104	Working of societies	37
105	Miscellaneous	38

Local Board administration

106	General	39
107	Finance—Receipts	39
108	Do. Expenditure	40
109	Railways	40

Municipal administration—Mufassal

110	General	41
111	Finance—Receipts	41
112	Do. Expenditure	42
113	Debt	42

Municipal administration—City of Madras

114	Finance	43
115	Works	43
116	Education	44
117	Sanitation and medical service	44
118	Miscellaneous	45

Marine

119-121	Madras Port Trust	45
122-123	Minor ports	46

Mortality from wild animals and snakes

124	Mortality	47
125	Rewards	47

Miscellaneous

126	Arms, explosives and sulphur	48

CHAPTER IV—PRODUCTION AND DISTRIBUTION

PARAS. PAGE

Agriculture

127 General ... 49
128 Agricultural research and experiments ... 50
129 Scientific research and experiments ... 51
130 Aid to the public ... 51
131 Agricultural machinery ... 52
132 Agricultural associations, shows and fairs. 52
133 Agricultural engineering ... 52
134 Finance ... 52
135 Civil Veterinary Department ... 52

Weather and crops

136 Rainfall ... 53
137 Crops ... 54

Horticulture

138 Government Botanic Gardens and Parks, the Nilgiris ... 55
139 The Agri-Horticultural Society, Madras ... 55
140 Government cinchona plantations ... 56

Fisheries

141 General ... 56
142 Coast section ... 57
143 Inland fisheries ... 57
144 Marine work ... 58
145 Fishing experiments ... 58
146 Socio-economic work ... 58

Forests

147 Area ... 59
148 Communications and buildings ... 59
149 Protection of forests ... 60
150 Sylviculture ... 61
151 Exploitation ... 61
152 Finance ... 61
153 Research and experiments ... 62
154 Miscellaneous ... 62
155 Forest College, Coimbatore ... 62

Mines

156 Output ... 63
157 General condition of the employees ... 63

PARAS. PAGE

Manufactures

158 General ... 63
159 Factories ... 64
160 Department of industries ... 65

Sea-borne Trade

161 General summary ... 66
162 Customs revenue ... 67
163 Foreign imports ... 67
164 Foreign exports ... 69
165 Government transactions ... 70
166 Shipping ... 70
167 Trade according to countries ... 70
168 Coasting trade ... 71
169 Ports ... 71
170 Miscellaneous ... 71

Public Works

GENERAL

171 Administrative changes ... 71
172 Chief Engineer's office ... 72

CIVIL WORKS

173 Works in progress ... 73
174 Workshops ... 74

RAILWAYS

175 Development ... 74
176 Accidents ... 74
177 Miscellaneous ... 74
178 TRAMWAYS ... 75
179 CANALS ... 75

IRRIGATION

180 Gross expenditure and revenue ... 75
181 Class I, Major works ... 75
182 Class II, Minor works and navigation ... 76
183 Class III works ... 76
184 Class IV, Agricultural works ... 76
185 Investigation of projects ... 76
186 Miscellaneous ... 77
187 Ayacut maps ... 77
188 Hydro-electric survey ... 77

CHAPTER V—REVENUE AND FINANCE

Revenue and Finance other than Municipal

(*a*) GROSS REVENUE

189 Revenue and expenditure ... 78
190 Surplus revenue ... 79
191 Cash balances ... 79

(*b*) IMPERIAL REVENUE AND FINANCE

192 General ... 80
193 Land revenue ... 80
194 Customs ... 80
195 Opium ... 80
196 Salt ... 80
197 Excise (Abkāri) ... 81
198 Stamps ... 81
199 Income-tax (excluding super-tax and excess profits duty) ... 82
200 Super-tax ... 82
201 Excess profits duty ... 82
202 Other Imperial receipts ... 82
203 Transfers between Imperial and Provincial ... 82
204 Expenditure on famine relief ... 83
205 Other Imperial expenditure ... 83
206 Capital outlay on State railways and Irrigation works not charged to revenue ... 83
207 Imperial loans ... 83

(*c*) REVENUE AND FINANCE OTHER THAN IMPERIAL.

208 Provincial revenues ... 83
209 Land revenue ... 83
210 Stamps, Excise and Income-tax ... 84
211 Forests ... 84
212 Registration ... 84
213 Canal revenue ... 84
214 Other Provincial receipts ... 84
215 Expenditure on famine relief ... 85
216 Other Provincial expenditure ... 85
217 Provincial loans ... 85
218 Local funds ... 86
219 **Municipal revenues** ... 87

Excise Administration

220 Administrative changes ... 87
221 Licensing Board and Advisory Committees ... 88
222 Temperance measures ... 88
223 Country spirits ... 88
224 Toddy ... 89
225 Foreign liquor ... 89
226 Intoxicating drugs ... 89
227 Finance ... 89
228 Opium ... 89
229 Offences ... 90

CHAPTER VI—VITAL STATISTICS AND MEDICAL SERVICES

PARAS.		PAGE
230	**Details of census**	**91**
	Births and deaths	
231	Population	91
232	Registration of vital statistics	91
233	Chief diseases	92
234	Europeans and Eurasians	92
	Emigration and immigration	
235	Regulated	93
236	Non-regulated	93
	Medical relief	
237	Medical institutions	93
238	Relief	93
239	Finance	94
240	Madras Medical College	94
241	Medical schools	95
242	**The Pasteur Institute, Coonoor**	95
243	**Lunatic asylums**	96
	Sanitation	
244	Sanitary Board	96
245	Sanitary Commissioner	96
246	Sanitary Engineer	97
247	**Vaccination**	98

CHAPTER VII—INSTRUCTION

PARAS.		PAGE
248	**General system of public instruction**	**99**
	Education	
249	Administrative events of the year	99
250	General statistics	99
251	University and collegiate education	99
252	Secondary education	100
253	Elementary education	100
254	Special education	100
255	Female education	101
256	European education	101
257	Education of Muhammadans	101
258	Education of backward classes and others	101
259	Finance	102
260	**Reformatory School, Chingleput**	102
	Miscellaneous	
261	Government examinations	103
262	Lawrence Memorial School	103
263	School of Arts, Madras	104
264	**Literary Societies**	**104**
	Literature and the Press	
265	Public Libraries	104
266	The Madras Record Office	105
267	Periodicals	105
268	Registration of books	105
	Arts and sciences	
269	Government Museum	106
270	Meteorology	106
271	Astronomy	106

CHAPTER VIII—ARCHÆOLOGY AND EPIGRAPHY

272	Archæology	108
273	Epigraphy	108

CHAPTER IX—MISCELLANEOUS

PARAS.		PAGE
274	**Ecclesiastical jurisdiction**	**110**
	Ecclesiastical	
275	Church of England	110
276	**Stationery**	111
	The Government Press	
277	Finance	111
278	Publications	111
279	Printing and binding	111
280	Miscellaneous	111
281	**The Chemical Examiner's department**	112
282	**Charitable institutions**	112
283	**Muhammadans in the service of Government**	113

PREFATORY NOTE

IN compliance with the orders of the Government of India, Part I of this publication—the "General Summary"—deals with the calendar year 1920 and Part II—the main report—with the official year 1919–20.

PART I

GENERAL SUMMARY

Political situation.—1. The close of the year 1919 was signalized by the passing of the Reforms Act (the Government of India Act, 1919) and the publication of His Majesty the King's gracious message to the people of India. The appeal for co-operation made by His Majesty failed to elicit any response from the extreme Nationalists whose violent attacks on the Government continued unabated. The Moderate politicians, while expressing their appreciation of the new scheme, took few active steps to counteract the campaign carried on by the Nationalists. Vigorous propaganda on behalf of the non-co-operation and Khilafat movements succeeded during the latter part of the year in inducing or compelling a few persons to resign their titles or honorary offices, and, on the occasion of the elections for the new Council at the end of November, the special efforts made to dissuade electors from going to the poll were attended, especially in the Muhammadan constituency, with some slight success. But neither movement succeeded in evoking general enthusiasm in any considerable section of the people and the later and the more extreme phases of non-co-operation, which included boycotting of the courts by lawyers and of the schools by students, found very little favour in the Presidency. The relations between Brahmans and non-Brahmans showed no improvement. An attempt to obtain an agreement between them on the subject of the number of seats to be reserved for non-Brahmans in the Legislative Council proved a failure and the matter had to be referred to Lord Meston for decision.

The year was marked by a good deal of economic unrest principally confined to the City of Madras. Strikes and threats of strikes were the order of the day. Workers of almost every kind established unions, some of which had no clearly defined industrial or craft basis and many of which were either inaugurated by or included among their office-bearers well-known political agitators. A labour conference attended by about 3,000 labourers was held in Madras in March. A central Labour Board was established, to which it was intended that all labour unions in the Presidency should be affiliated. In June the employers of labour in Madras requested the Government to appoint a committee to inquire into the causes of labour unrest. The Government accepted the proposal and nominated Mr. Justice Kumaraswami Sastri, Judge of the High Court, as President. The Labour Board which was asked to nominate representatives of labour to serve on the committee declined to do so on the ground of Mr. Kumaraswami Sastri's supposed responsibility for the Rowlatt legislation. The proposed committee had therefore to be abandoned.

During March the City of Madras witnessed an occurrence which illustrated how easily a mob may be inflamed to violence. One of the bridges of the city was being rebuilt to accommodate the tramway, and a rumour was started that children were being decoyed away for sacrifice in connexion with the sinking of the piers. The scare originated on the 19th

March and spread like wildfire during the two following days. Suspicion was directed particularly against strangers from the north of India. Men were assaulted for no other reason than that they were seen talking to children or women or were accompanied by children in parts of the city where they were not known and, in some cases, merely because they "looked suspicious." One man was assaulted by an excited mob while taking his own child in a sidecar. At least four men who were perfectly harmless died of the injuries which they received. There was nothing to show that when the rumour started more children than usual were temporarily missing from their homes.

Constitutional changes.—2. The arrangements for holding the first election under the Reforms Act occupied the greater part of the year ; but outside the City of Madras the preparations for the elections did not arouse any very great interest. In Madras City the breach between Brahmans and non-Brahmans was emphasised by the appeals of the latter to voters not to vote for any Brahman. The claim of the Brahmans that the reservation of seats for non-Brahmans was unnecessary was vindicated by the fact that in no single instance did a non-Brahman candidate have to take advantage of the privilege of reservation. So far as regards the filling of seats the non-co-operation movement was a signal failure. Candidates appeared for every seat in the Legislative Council as well as for all the seats allotted to the Presidency in the Legislative Assembly and the Council of State. The percentage of electors who recorded their votes surpassed expectations. It was over 50 per cent in Madras City and in Chingleput and Bellary. In the southern districts heavy floods prevented easy access to the polls and greatly reduced the number of voters. So far as Hindus are concerned, it was only in two or three of the Telugu districts of the East Coast that any evidence appeared of non-co-operation on the part of the electors. Muhammadan feeling in connexion with the Khilafat movement did, however, reduce the polling in Muhammadan constituencies. The result of the elections was to return to the local Council a large majority of non-Brahmans, many of whom belonged to the "Justice" party. The leader of this party was sent for by His Excellency the Governor and a Ministry was eventually formed of three non-Brahman politicians, the office of the Advocate-General, which is closely connected with the Government, being assigned to a Brahman politician of the Moderate type. One member of the Executive Council went out of office on the introduction of the reforms, when the strength of the Council was raised to four, and the two vacancies were filled by the appointment of a Muhammadan and a Brahman.

Finance.—3. A better season helped to increase the collections under Land Revenue. The raising of the duty on country spirits with effect from the 1st April, though it reduced consumption by about 8 per cent, sent up the receipts under that head nearly 12 per cent. The toddy and opium revenue also showed an appreciable increase. Larger imports of cotton piece-goods, metals, motor vehicles, paper and pasteboard swelled the receipts under Customs. The revival of commercial activity led to a steady and continuous increase of revenue from stamps, while the collection of Excess Profits duty, which began to come in only from October 1919, augmented the receipts under Income-tax. Coincidently with the

rise in receipts charges increased. The bulk of the increase was due to the additions, permanent or temporary, made to the pay of the subordinate Government services, including the police force and village officers, to meet the increased cost of living, and to the revision of salaries of the various Imperial and Provincial Service officers. Larger amounts were spent under Education in the grant of stipends to pupils of training schools, in the payment of subsidies to local bodies and in other grants-in-aid. The transfer of district headquarter hospitals to Government management and expenditure on the equipment of hospitals contributed to the increase in the charges under Medical. In the Public Works Department, a larger outlay was incurred on buildings and repairs and in the restocking of European stores needed by that department.

Agriculture.—4. Research work was pursued in various directions and successful demonstrations were given to the ryots, especially on the uses of manures. The chemical survey of the soils of the Gōdāvari delta was completed, while the Agricultural Chemist analysed 642 samples in his laboratory. The Madras Agricultural Pests and Diseases Act was more widely applied to Cambodia cotton in Coimbatore, Salem, Trichinopoly and Madura districts, to the budrot of palmyras and coconuts in Gōdāvari and Kistna districts and to the water hyacinth in certain areas. Beneficial results were achieved by the Agricultural department joining hands with the Co-operative and the Veterinary departments. The Co-operative department in particular ably seconded the efforts of the Agricultural department in arranging for demonstrations and the purchase of implements, seed, manure, etc. The department procured fish manure from the West Coast and stocked it in various depots for sale. In the College of Agriculture an important change was effected by separating the course of studies for the certificate and the diploma. The diploma course was restricted to candidates who had passed the Intermediate examination of the University.

Fisheries.—5. Steady progress marked the work of the Fisheries department. The co-operative movement and the scheme for specialized elementary education for fishermen were both firmly established. The development of the industrial section proceeded on the same lines as in the previous year. Several schemes, such as the establishment of a fisheries college, the provision of a steam trawler and the expansion of the marine aquarium, were under consideration. The staff included a Director, a Marine Biologist, three Assistant Directors and nine Sub-Assistants.

Forests.—6. An extent of 59 square miles of unproductive forest was disafforested during the year, chiefly for purposes of cultivation. The shortage of officers and financial stringency hindered any striking progress in forest development, but some works were carried out to facilitate the transport of produce from timber and fuel coupes, a scheme was set on foot for the increased propagation of sandalwood and redsanders in several of the forests and arrangements were made for working the Chenat Nayar forests. The last-mentioned project is expected to produce an annual yield of 10,000 tons of timber. A research officer, who was appointed during the year, devoted his attention solely to sylvicultural problems. Under the forest panchayat system, no less than 372 panchayats were in existence

and controlled the management of 543 square miles, mostly of grazing grounds, but the results were not encouraging and it was found necessary during the year to depute a special officer to study the working of the system and to suggest improvements. A private company was formed under the designation of the Carnatic Paper Company with the object of establishing a pulping mill at Rajahmundry to be fed with bamboo from the Bhadrāchalam forests.

Trade.—7. The aggregate value of the sea-borne trade (including treasure) during the first nine months of the year was Rs. 5,426 lakhs, showing an increase of Rs. 216 lakhs, or 4 per cent, as compared with the corresponding period of last year. The increase was brought about chiefly (1) by larger imports from foreign countries as a result of the larger tonnage available since the armistice, especially after April 1919, (2) by a considerable fall in freights and insurance charges, and (3) by a high exchange. The removal of nearly all the restrictions and prohibitions which were in force during the war also contributed towards the expansion, but the fall in prices owing to the accumulation of stocks and reduced purchasing power in foreign markets curtailed exports, notably since May 1920. Foreign trade, excluding Government transactions, improved by Rs. 28 lakhs, or 0·8 per cent. Imports expanded by Rs. 516 lakhs, or 55 per cent, while exports declined by Rs. 488 lakhs, or 19 per cent. The excess of exports over imports during the nine months amounted to Rs. 611 lakhs, while it was Rs. 1,615 lakhs for the corresponding period of last year. Coasting trade improved by Rs. 89 lakhs, made up of a decrease of Rs. 4 lakhs under imports and an increase of Rs. 93 lakhs under exports.

Industries.—8. The great awakening of interest in industrial development in Southern India was reflected in the considerable number of new companies floated in the early months of the year. Further evidence was afforded by the increased demands for assistance received by the Department of Industries. The development of industries was in many cases retarded by the inability to obtain machinery at a reasonable price and for delivery within a reasonable period, but this obstacle had at least the countervailing advantage of checking the tendency to multiply mere speculative undertakings such as had shown itself in connexion with certain classes of small mills and factories. Owing to the high cost of liquid fuel and the shortage of raw material a number of rice mills and groundnut mills were closed for a considerable part of the year. With the object of introducing improved methods and machinery amongst handloom weavers, the Government sanctioned the starting of ten additional peripatetic weaving parties, of which six actually began work. A notable development of the manufacture of finished leather goods, including foot-wear, was signalized by the establishment of three additional leather manufacturing firms in Madras. A company was newly formed for the manufacture of salt on improved methods and a movement was on foot to revive the glass-making industry which made an unsuccessful beginning in Madras a few years ago.

Co-operation.—9. The general public continued to be very cordial in its attitude towards the co-operative societies. Village societies enlarged their trade activities, purchasing and selling agricultural and domestic

produce, implements, etc. Shoemakers and locksmiths started special types of societies, while the officers working under the Labour Commissioner organized a number of societies solely for field labourers. The Madras Central Urban Bank was converted into a regular federation of all central banks except the Madras Christian Central Bank. The Government permitted the investment in central banks of the deposits of contractors of local bodies and municipalities and the jail department as well as security deposits of local fund and municipal employees. Owing to the stringency of the money market the inflow of deposits fell between January and June. The difficulty was partly met by paying higher rates of interest and partly by overdrafts obtained from the Bank of Madras.

Civil Supplies.—10. With the close of the year 1919 the difficulties which had previously arisen from the scarcity of food supplies disappeared. The importation of large quantities of Burma rice, good harvests and increased stocks rendered it possible to remove the restrictions on both inter-district and inter-provincial movements of rice early in the year. Generally speaking, this resulted in a fall in the selling price of rice. The demand for Burma rice decreased considerably by the middle of the year and continued to be comparatively dull up to the end of the year when the control over its export was removed. Although the inter-provincial restrictions on the export of food-grains had disappeared, the States of Mysore and Hyderabad continued to prohibit export from their territories. Under this anomalous condition of affairs there was free movement of grain from this Presidency to the two States, but not *vice versa*.

Public Works.—11. With the further relaxing of financial pressure, more money was available and consequently a larger programme of construction was drawn up, especially for water-supply and drainage works and medical and educational buildings. Progress was made with the Tanjore and Madura water-works schemes, and with the preliminary arrangements for the drainage works at Vellore and the water-supply at Tuticorin. New hospitals were under construction at Rāyapuram, Vizagapatam and Kurnool. A bridge over the Hindri river costing about Rs. 2 lakhs was completed. In the city of Madras extensive additions and improvements were made to the Council Chamber in order to provide suitable accommodation for the new enlarged Council. The widening of two bridges in Madras in order to permit of the tramway lines being laid over them was begun. A special officer was appointed to prepare a scheme for the systematic re-arrangement of Government buildings in Madras City, including the provision of quarters for officials in Madras. Under irrigation, satisfactory progress was made on the Toludur project in the South Arcot district, the Mopad project in the Nellore district and the Kaniyampālaiyam project in the Coimbatore district. Water-power resources were investigated in the Vizagapatam and Madura districts. The estimates for the great Cauvery reservoir were, at the end of the year, still with the Government of India.

Police.—12. Owing doubtless to the fact that wages had to some extent adjusted themselves to high prices there was a diminution of crime against property. Grave crime generally was also less than in the previous year. A determined effort was made to tackle organized gang crime. Parties of

police were deputed to round up some of the gangs and the arrest of a number of notorious leaders broke up several of the organizations. Special action had to be taken in the case of the Chenchus, a predatory tribe in Kurnool, who had got completely out of hand and were committing crime with impunity. A party of 3 sergeants and 150 men under a Superintendent of Police in the course of 4½ months' hard and strenuous work succeeded in arresting 69 of the gang, thereby effectively terminating Chenchu crime. The Criminal Tribes Act was extended to four more criminal tribes and the provisions of section 10 (*a*) (requiring reports at fixed intervals) applied to one more. In the village of Perungavanallūr in the Madura district, on the 3rd April 1920, a large mob of Kallars opposed the arrest of those of their fraternity who had evaded registration under the Act. A serious riot ensued, in the course of which 11 Kallars were killed and 8 injured. Hindu-Muhammadan feeling in Nellore continued to be strained, while at Muttupet in the Tanjore district a Hindu marriage party was attacked by a body of Muhammadans, because the former carried a procession round a mosque. Labour trouble, though acute, exhibited itself only in strikes and lockouts both in Madras City and outside, and did not give rise to serious disturbances except on one occasion in Madras, on the 9th December 1920, when the police came into collision with the strikers. Persistent stone-throwing by the mob compelled the police to open fire, hitting 16 of the rioters, of whom two succumbed to their injuries. Several attempts were made to wreck trains. One of these was successful and caused a serious disaster near Arkonam on the 7th October 1920. Owing to the removal of a length of the rails the engine and a third-class carriage of the Bangalore Mail capsized and two third-class carriages telescoped. Thirteen passengers were killed and twenty-two injured. The miscreants were believed to be dismissed employees of the railway, but they were not discovered.

The grant of a temporary allowance on account of the high cost of living produced a good effect on recruitment and vacancies in the rank and file diminished appreciably. Rewards were more extensively distributed in most districts and greater co-operation secured from the village officers.

Civil and Criminal Justice.—13. The non-co-operation movement had no effect on the work coming before the courts. Litigation was pursued with great energy and litigants continued to exhibit their preference for the regular courts to the neglect of their local village tribunals. The increase in the number of original suits was particularly marked in the superior courts. Several temporary courts were established, but nevertheless there was a greater pendency of all classes of work except small causes. The new Small Cause Courts did excellent work. Cases in the Sessions Courts were as plentiful as in the previous year, but the reports of District Magistrates indicated a diminution in the number of grave offences.

Jails.—14. Useful work was done by the Borstal Institution, Tanjore, in training and reclaiming adolescents. The conversion of the Central Jail, Vizagapatam, into a jail for habituals of the Telugu districts, to be conducted on the model of the Salem Habitual Jail, was under consideration. Some spade work was done in connexion with the proposal to

inaugurate a Discharged Prisoners' Aid Society in Madras with branches in the various districts. Several leading members of the various communities came forward with promises of assistance. The rates of sickness and mortality showed a considerable improvement on those of the previous year. Towards the end of the year influenza became epidemic in some of the jails though in a much less virulent form than in the previous year.

Public Health.—15. The birth-rate was below normal, though slightly higher than that of the previous year. The absence of influenza in a severe form caused a marked decrease in the total death-rate. Plague claimed a larger number of victims than in 1919, but under every other head of death causation there was a decline, especially under cholera and smallpox. Eight cholera parties were working in the Presidency. There was a decline in infant mortality. As in other parts of India the movement for the improvement of infant health and of maternity conditions attracted some interest among the educated classes, and the establishment in Madras of a private hospital for children, managed entirely by Indian doctors, was a tangible sign of this interest.

Medical.—16. The personnel of the Medical department continued to be inadequate and this rendered impossible the extension of medical relief in rural areas. Many officers remained absent from the Presidency on military duty. The headquarter hospitals at Calicut, Trichinopoly, Salem and Nellore were taken over by Government during the year, as also the Women and Children's Hospital, Calicut, St. Bartholomew's Hospital, Ootacamund, and the Victoria Caste and Gosha Hospital, Madras. A new medical school was opened at Guntūr and the school at Rāyapuram was enlarged in order to meet the rapid increase in the number of students seeking admission. Proposals were under consideration for the construction of a new medical school at Rāyapuram and for the establishment of a medical college at Vizagapatam.

Legislation.—17. The legislative activity during the year was exceptional. The Legislative Council sat on twenty-five days and passed no less than thirteen Acts, the more important of them being the Children Act, the District Municipalities and Local Boards Acts, the Town Planning Act, the Elementary Education Act and the Village Panchayats Act. A private Bill to provide for the voluntary registration of Mussalman marriages and divorces did not get beyond the Select Committee stage and the introduction of another private Bill to restrict house rents was negatived by the Council.

The members of the Legislative Council as constituted by the Indian Councils Act of 1909 went out of office on the 17th December 1920, the date on which the provisions of the Government of India Act, 1919, in so far as they relate to the constitution of the Madras Legislative Council, were brought into force.

Education.—18. Under elementary education the work of the year consisted mainly in the consolidation and improvement of existing arrangements. No less than 543 elementary school buildings were constructed, and the Government distributed nearly 9 lakhs of rupees among local bodies to enable them to pay increased salaries to their teachers. An attempt to extend elementary education among Muhammadans by

introducing secular subjects into the curriculum of Muhammadan schools, where hitherto only the Koran was taught, was attended with some success. An Elementary Education Act was passed and the Educational Rules were amended so as to make compulsory the admission on half fees of poor pupils belonging to backward classes and communities. In most of the secondary schools, public as well as private, systematic medical inspection of children was undertaken. Female education continued to receive special attention. Four new secondary schools for girls were opened and an attempt to meet the rapidly growing demand for female teachers was met by the opening of three Government training schools and of preparatory classes in existing training schools, designed to give such a general education to Hindu women as would fit them for subsequent admission to training schools. A Provincial Educational Service for Women was constituted with a cadre of 15 posts. The Engineering College moved during the year into its new building at Guindy and a new school of engineering was opened temporarily at Trichinopoly.

Publicity Organization.—19. The Madras Publicity Bureau, which was established in July 1919, did useful work in bringing before the public the activities of the various departments and in explaining the policy of Government. The Bureau issued news slips to the English and Vernacular press and published leaflets on a large variety of subjects. Up to December 345 news slips and 82 leaflets (nearly 4 million copies) were issued. The information branch met the demands of inquirers for information on subjects dealt with by the various Government departments. Towards the end of the year a library and reading room were opened with the object of aiding Madras publicists and advanced students in their researches in social, administrative, political and economic problems.

General Conditions.—20. In spite of a rainfall which was irregular and generally below the average, agricultural conditions were not unfavourable. Prices remained high but with a tendency to fall. Wages readjusted themselves so as to give the labourer command of almost the same purchasing power as before the war. Except among certain sections of industrial labourers, whose complaints were to some extent prompted by political agitators, and from Government servants and others on fixed salaries, there was no general expression of discontent with the prevailing economic conditions. Over the greater part of the Presidency an observer would have found but few signs of economic change and little recognition of the political transformation which was impending.

PART II

THE REPORT

CHAPTER I

PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES

1. *Vide* pages 1 to 10 of the Report on the administration of the Madras Presidency for the year 1911–12.

POLITICAL

HISTORICAL SUMMARY

2. *Vide* pages 11 to 33 of the Report on the administration of the Madras Presidency for the year 1911–12.

FORM OF ADMINISTRATION

3. *Vide* pages 34 to 54 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHARACTER OF LAND TENURES

4. *Vide* pages 55 to 60 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SURVEY

5. *Vide* pages 61 to 72 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SETTLEMENTS

6. *Vide* pages 73 to 86 of the Report on the administration of the Madras Presidency for the year 1911–12.

CIVIL DIVISIONS OF THE BRITISH TERRITORY

7. *Vide* pages 87 to 100 of the Report on the administration of the Madras Presidency for the year 1911–12.

DETAILS OF THE CENSUS OF 1911—TRIBES AND LANGUAGES

8. *Vide* pages 101 to 104 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHANGES IN THE ADMINISTRATION (1919–20)

9. The Right Hon'ble Sir Freeman Freeman-Thomas, *Baron* Willingdon of Ratton, G.C.S.I., G.C.I.E., G.B.E., assumed the office of Governor on the 10th April 1919. Thereon the Hon'ble Sir Alexander Cardew, K.C.S.I., who was holding this office during the interregnum between the departure of Lord Pentland and the arrival of Lord Willingdon, resumed his office as an Ordinary Member of the Executive Council, and vacated it on the 15th April 1919 in order to take up special duty as Chairman of the Jails Committee; he was succeeded in the Council by the Hon'ble Mr. C. G. Todhunter, C.S.I., I.C.S. The Hon'ble Khan Bahadur Muhammad Habib-ul-lah Sahib Bahadur acted as Temporary Member of Council during the absence of the Hon'ble Diwan Bahadur Sir P. Rajagopala Achariyar, K.C.S.I., C.I.E., on leave for five months and twenty-two days from the 30th July 1919; and the Hon'ble Mr. A. R. Knapp, C.B.E., I.C.S., acted in the place of the Hon'ble Mr. L. Davidson, C.S.I., I.C.S., on leave from the 4th November 1919 until after the close of the official year.

HIS EXCELLENCY THE GOVERNOR'S TOURS.

10. On his return to the hills from Madras where he received an address of welcome from the Corporation and presided at a meeting of the citizens convened for the purpose of concerting measures to celebrate the formal declaration of peace, His Excellency the Governor halted at Tiruppur on the 14th June 1919 to lay the foundation stone of the new Holmes Cotton Market proposed to be constructed by the municipality of Tiruppur. He also distributed prizes at the Cattle Show held there and left for Ootacamund the same day. Later His Excellency accompanied by Her Excellency Lady Willingdon visited the Cuddapah and Bellary districts. At Cuddapah Their Excellencies received addresses from the Municipal Council, the District Board, the Proddatur Municipal Council, the District Congress Committee and the Anjumani-Mufeedi Islam. Her Excellency received an address from the ladies of Cuddapah. On their way to Bellary Their Excellencies halted at Hagari, where His Excellency visited the agricultural farm and discussed the question of the Bellary water-works. At Bellary they received addresses from the Municipal Council, the District Board and the Adōni Municipal Council. Their Excellencies returned to Ootacamund on the 7th July. On the 14th idem His Excellency specially went to Madras to take part in the Peace Day celebrations. He also unveiled His Majesty the King's statue, the gift of M.R.Ry. Diwan Bahadur Govindoss Chathurbbujadoss Garu to the City of Madras, and presided at the Durbar at which the terms of the Peace were read in English and the principal vernaculars of the Presidency. The next tour was to the Ganjām district where the scarcity conditions due to defective rainfall had rendered it necessary to open famine relief camps. Leaving Ootacamund on the 31st July His Excellency arrived at Berhampur on the 2nd August and in the course of about five days he covered over 300 miles by road and inspected 13 works employing 11,363 persons, and 16,304 persons in receipt of gratuitous relief of whom 1,359 were men, 5,761 women and 9,184 children. On the return journey His Excellency halted at Waltair on the 7th August and discussed the details of the proposed harbour

scheme with several railway and other departmental officials who had specially come down from Simla, Calcutta and Madras. His Excellency accompanied by Her Excellency next visited Coimbatore on the 16th, 17th and 18th September. The Coimbatore Municipal Council and the District Board presented addresses to His Excellency. He visited the Forest and Agricultural Colleges and laid the foundation stone of a Students' Club at the Forest College and of a medical school. En route to Madras in October His Excellency visited Malabar and South Kanara. He spent four days at Nilambur acquainting himself with the question of the development of forest resources in that part of the Presidency. He visited several forests in the neighbourhood and the well-known teak plantations. The proposal to improve the navigability of the Nilambur river for the transport of forest timber engaged the attention of His Excellency, who also inspected the line of the proposed forest tramway. From Nilambur His Excellency proceeded to Tanur, where Her Excellency joined him on the 6th October. The Government Fish Factory at that station was inspected and a deputation received from the Mappilla fisher communities of Ponnani and Ernad. Mangalore was the next camp, where the Municipal Council and the South Kanara District Board presented addresses. His Excellency received deputations from the South Kanara District Association, the Islamia Club and the fisher community, and attended the celebration of the College Day of the Government College. Their Excellencies then visited Cannanore, Tellicherry, Mahē, Calicut, Palghat and Kollengode. The Municipal Councils of Cannanore, Tellicherry, Calicut and Palghat and the District Board of Malabar presented addresses and six deputations from local bodies or associations, and three from different communities waited upon His Excellency. Their Excellencies reached Madras on the 15th October 1919. His Excellency visited the Nellore and Gōdāvari districts in December. At Nellore His Excellency received addresses from the Municipal Council and the District Board and deputations from the District Congress Committee, the ryots of the district and the Muhammadan Educational Association. His Excellency next proceeded to Kavali, where he inspected the Criminal Settlement and presided at the combined function of distributing prizes and laying the foundation stone of the new building of the Board High School. The next halt was made at Ongole, where His Excellency received an address from the Municipal Council, saw specimens of the famous Ongole breed of cattle, laid the tablet for the main building of the Clough Memorial Hospital, opened Mr. P. Ayyanna Chetti's choultry and attended the Missionary Conference dinner. From Ongole His Excellency proceeded to Rajahmundry where he received an address from the Municipal Council. He also visited the Dowlaishweram anicut. From Rajahmundry His Excellency motored to Samalkot and thence went by train to Pithāpuram and Cocanada. At Cocanada His Excellency received addresses from the Municipal Council and the Gōdāvari District Board and a deputation from the Gōdāvari District Association. He returned to Madras on the 23rd December. On the invitation of His Excellency the Viceroy His Excellency Lord Willingdon proceeded to Delhi in January 1920 to attend the conference of Heads of Provinces. The next tour was to the North Arcot district. Their Excellencies stopped at Vellore on the 18th and 19th February 1920. At Vellore His Excellency received addresses from the Vellore Municipal Council, the North Arcot District Board, the Walajapet Municipal Council and the Gudiyāttam Municipal Council, and deputations from the American Arcot Mission, the Muhammadan Educational Association, the Bar Association and the ryots of Tiruvannāmalai, Vellore and Gudiyāttam taluks. His Excellency also opened the Anjuman Industrial School. On the 17th and 18th March 1920 Their Excellencies visited Chingleput, Conjeeveram and Gingee. At Chingleput His Excellency received addresses from the local Municipal Council and the District Board and deputations from the Co-operative Banking Union and the Mirasidars of the district, and at Conjeeveram His Excellency received an address from the Municipal Council.

RELATIONS WITH TRIBUTARY STATES

TRAVANCORE STATE

(M.E. 1094—16TH AUGUST 1918 TO 15TH AUGUST 1919)

[*Report on the administration of the Travancore State for the year* 1094 *M.E.*, 1918-19 *A.D.*]

[The Maharaja, His Highness Sri Padmanabha Dasa Vanchi Pala Sir Rama Varma Kulasekhara Kiritapati Manne Sultan Maharaja Raja Rama Raja Bahadur Shamsher Jang, G.C.S.I., G.C.I.E., is a Kshatriya. His age is 63. He has a male heir. The area of the State is 7,625 square miles and the population, according to the census of 1911, is 3,428,975. The annual subsidy paid to the British Government is Rs. 8,10,652. The gross revenue is estimated at Rs. 1,81,83,432. The strength of the military force maintained during the year was 1,461]

General

11. His Highness the Maharaja was absent from the capital during the year on three occasions on short tours.

Revenue and finance

12. The total revenue of the State amounted to Rs. 1·82 crores, a figure higher than in any previous year and Rs. 16 lakhs more than in the one immediately preceding. The receipts under "Land Revenue" rose by over Rs. 2 lakhs and those under "Forest" by over Rs. 1½ lakhs. The other principal heads which contributed to the increase were "Customs" and "Stamps." The expenditure fell from Rs. 170·26 lakhs to Rs. 161·32 lakhs, so that there was a net surplus of Rs. 20·51 lakhs which raised the Darbar's balance from Rs. 39·47 lakhs to nearly Rs. 60 lakhs.

Protection and legislation

13. Four ordinary meetings and one extraordinary meeting of the Legislative Council were held during the year and eight Regulations were passed by the Council.

Police

The actual strength of the police force at the close of the year stood at 1,941 against a sanctioned strength of 1,977. The conduct and discipline of the force continued to be satisfactory. The State does not grow enough food to support the population and owing to high prices there was an increase under all the heads of grave crime except murder and culpable homicide not amounting to murder.

Criminal justice

The number of courts that exercised criminal jurisdiction was 77 or one more than in the previous year. The number of offences reported rose from 21,590 to 21,844, of which 12,734 were offences under the Penal Code. There were increases under theft, dacoity, criminal breach of trust and contempt of the lawful authority of public servants. There was a remarkable rise, from 132 to 460, in the number of juvenile accused of whom 404 were brought to trial and 380 convicted. The file of the magistracy rose from 21,590 to 21,844 and the arrears from 997 to 1,295. The number of cases committed to Sessions Courts was 158. Inclusive of those ordered to be re-tried or transferred from one court to another, the total number for disposal was 167, of which 2 were left undisposed of as against 7 in the previous year. The number of appeals for disposal by Sessions Courts, inclusive of the arrears and those remanded or transferred, fell from 439 to 347. Of these, 305 were disposed of, leaving a balance of 42 at the close of the year, against 411 and 28, respectively, in M.E. 1093. In the High Court, the number of referred cases for disposal was sixteen, of which eleven were disposed of, and the number of appeals inclusive of

Prisons

arrears was 140 of which 104 were disposed of. The total prison population was 1,285. Eight hundred and thirty prisoners were discharged, leaving at the close of the year 455 prisoners as against 509 in the previous year. The year was marked by a considerable increase in the

Civil justice

volume of original litigation throughout the State. While the number of courts dispensing civil justice remained the same, the institutions as compared with those of the previous year showed an increase of 6,865 original suits and 281 appeals. In Munsifs' Courts, the total institutions rose from 68,409 to 75,199, and the disposals, though 3,973 more than in the previous year, formed only 73 per cent of the total number for disposal. In District Courts, inclusive of arrears, the numbers for disposal were 1,820 ordinary suits and 87 small causes, of which 701 and 44, respectively, were disposed of. In regard to appellate work in District

Courts the disposals formed 51 per cent of the total number for disposal, as against 52 in the previous year. In the High Court the appellate work consisted of 458 first appeals and 644 second appeals, as against 437 and 651, respectively, in M.E. 1093. The total number for disposal inclusive of arrears was 2,075, of which 908 were disposed of, leaving a balance of 1,167. The total number of documents presented for registration rose from 241,048 to 293,719, which is the highest on record. Inclusive of 39 documents pending at the beginning of the year, the total number for registration was 293,758, of which 293,594 were registered, 102 were refused registration and 18 were returned unregistered to the parties. Of the remaining 44 documents pending disposal at the close of the year, 10 were under various stages of inquiry and 34 were under reference for adjudication of stamp-duty. The aggregate value of the transactions rose from Rs. 7·29 crores to Rs. 8·77 crores, while the average value per document fell from Rs. 303 to Rs. 299. As usual, 95 per cent of the documents registered related to immovable property.

Registration

14. The season was on the whole not unfavourable to agriculture. The prices of food-grains and the wages of labour were higher than in the previous year. The average rainfall was 90·23 inches, or 6·33 inches more than in the previous year. Manurial experiments on paddy and on coconut were conducted, as in previous years, on an extensive scale, in different parts of the State with very beneficial and interesting results. Attention was also devoted to a study of the varieties of coconuts and careful records were kept of the development of leaves, fruit spikes, yield, and other particulars concerning 44 apparently different varieties. Other experiments were undertaken with sugarcane, tapioca, banana, sweet potatoes, pepper and cholam. At the end of the year, there were 117 factories as against 108 in the previous year. The total volume of the external trade was Rs. 9·04 crores as against Rs. 8·20 crores. The value of the exports was Rs. 5·68 crores or 62·81 per cent and that of the imports was Rs. 3·36 crores or 37·19 per cent of the total volume of trade, the percentages in the previous year being 63·2 and 36·8, respectively. The total expenditure on Public Works amounted to Rs. 27·80 lakhs as against Rs. 26·31 lakhs in the previous year. In previous years the receipts of the Shencottah-Quilon line were not sufficient to pay the guaranteed interest and a deficit had to be met annually by the Darbar. But after the opening of the Quilon-Trivandrum extension for traffic from the 1st January 1918, the receipts of the entire line from Shencottah to Trivandrum developed to such an extent that there was during the year under report a net revenue of Rs. 1·61 lakhs after payment of the guaranteed interest on the capital raised for the construction of the Shencottah-Quilon line. The amount spent by the Darbar during the year on account of the Quilon-Trivandrum extension was Rs. 37,030, the total expenditure on the extension up to the end of year being Rs. 50·55 lakhs.

Production and distribution

Agriculture

Factories

Trade

Public works

Railway

15. The total number of births registered was 66,683 and the total number of deaths was 74,739 as against 72,658 and 54,066, respectively, in the previous year. The birth and death rates were 19·4 and 21·8 per mille, respectively. Cholera prevailed in an epidemic form, and influenza added largely to the deaths from fevers. Owing to the subsidence of smallpox in the State, the total number of vaccinations performed fell from 266,909 to 215,243 and the number of infantile vaccinations from 14,476 to 12,104. Twenty-eight hospitals and 30 dispensaries, or one more hospital than in the previous year, were maintained during the year, and the number of in-patients in all the State institutions together, both general and special, was 19,620 against 18,336. The State ayurvedic department also is said to have done much useful work.

Vital statistics and medical services

Diseases

Vaccination

Medical relief

16. English education made considerable headway. As many as 37 new schools were started and liberal contributions were made by the public towards providing additional accommodation and equipment in existing schools. The total number of recognized institutions rose from 2,828 to 2,845 but the strength fell from 375,448 to 365,868. The decrease is almost entirely confined to vernacular schools. Of the total population

Education

of the State, viz., 3,428,975 according to the census of 1911, 10·67 per cent were attending recognized schools as against 10·95 in the previous year. The percentage of pupils attending such schools to the total population of school-going age was 71·1 as against 72·8 in the previous year. The number of collegiate institutions affiliated to the Madras University was five with a strength of 1,090 as against 1,041 in M.E. 1093. The number of recognized English schools increased from 94 to 102 and the strength from 24,434 to 26,931.

COCHIN STATE

(M.E. 1094—16TH AUGUST 1918 TO 15TH AUGUST 1919)

[*Report on the administration of the Cochin State for the year* 1094 *M.E.*]

[The Raja, His Highness Sri Sir Rama Varma, G.C.I.E., is a Kshatriya. He is 61 years of age and has male heirs. He pays a tribute of Rs. 2,00,089 and maintains a military force of 290 men. According to the census of 1911 the population of the State was 918,110. The gross revenue was Rs. 53 lakhs. The Resident for Travancore is also Resident for Cochin]

General and political

17. His Highness the Raja completed his sixtieth year on the 5th October 1918 and this event and the signing of the Peace Treaty with Germany were celebrated throughout the State with great rejoicings. His Highness was invested with the Insignia of G.C.I.E. on the 24th March 1919 at the Banqueting Hall, Madras. He left Madras on the 7th April 1919 for Coonoor where he spent the hot weather and returned to the State on the 15th June.

Revenue and finance

18. There was a fall of Rs. 0·96 lakh in the year's revenue from all sources which amounted to Rs. 53·03 lakhs, while the expenditure, which was only Rs. 19,368 less than the receipts, exceeded that of the previous year by Rs. 5·65 lakhs. The net assets at the end of the year amounted to Rs. 26·99 lakhs. The decrease in receipts was most noticeable under "Customs" (Rs. 1·90 lakhs), and this was due to the fact that the receipts of the previous year included two years' payment of the moiety of the net customs collections payable by the British Government to the Darbar under the Interportal Trade Convention. The largest increase in expenditure was under "Miscellaneous" (Rs. 2·01 lakhs) due mainly to contributions for war purposes. Noticeable increases occurred also under "Excise" (Rs. 1·12 lakhs), "Railway" (Rs. 1·03 lakhs), "Education" (Rs. 0·71 lakh) and "Public Works" (Rs. 0·95 lakh).

Protection and legislation

19. Four Regulations were passed during the year and seven Proclamations were issued by His Highness the Raja. The strength of the police force and the ratio of effective police to population and area were the same as in the previous year. The total number of cases reported under the Penal Code and local and special laws was 1,181 against 1,038 in the previous year. Including the previous year's pendency there were 1,199 cases for police investigation against 1,059 in M.E. 1093, of which 96·6 per cent was disposed of. The percentage of conviction of cases charged before the courts fell from 88·49 to 87·4. The average cost of a policeman was Rs. 212·02 against Rs. 196·40 in the previous year. There was no appreciable change in the volume of work for disposal by magistrates or in the outturn. The percentage of conviction fell from 31·3 to 30·3. The percentage of appealable decisions of second-class magistrates appealed against was 27·9 against 27·2 in the previous year and in 44·2 per cent the original decisions were confirmed, against 38·3 per cent in M.E. 1093. Sessions Judges had for disposal 59 appeals against 73 in the previous year, of which 51 were disposed of. There were no noticeable variations in the work of the Chief Court. The number of prisons remained the same as in the previous year. The daily average number of prisoners was 185·80 as against 137·63 in the previous year. The number of village panchayat courts rose, by seven, to 19. Otherwise there was no change in the number of tribunals which exercised civil jurisdiction, original or

Police

Criminal justice

Prisons

Civil justice

appellate. The total number of suits instituted and of appeals filed in the year were 18,107 and 818, against 16,447 and 896, respectively, in the previous year, and 17,434 suits and 956 appeals were disposed of against 16,118 and 893 in M.E. 1093. In Munsifs' Courts the pendency increased further from 1,858 suits to 2,500 suits. Including arrears District Judges had 910 appeals for disposal and disposed of 669, leaving 241 at the close of the year, as against 388 in M.E. 1093. The Chief Court began the year with 164 appeals, received 296 and disposed of 287, leaving 173 at its close. The number of registration offices at the close of the year was 24 as against 22 at its beginning and the number of documents registered rose from 50,179 to 57,563. Eight Joint Stock Companies were registered during the year. Registration

20. The total area under cultivation rose, by about 450 acres, to 502,230 acres. The total current demand for the year under Land Revenue proper rose from Rs. 10·61 lakhs to Rs. 10·78 lakhs, the increase being due to the fact that no remission of assessment was granted. The aggregate demand fell from Rs. 11·77 lakhs to Rs. 11·65 lakhs. Only ·1 per cent of the current demand remained uncollected. At the Central Farm, experiments were continued in the rotation of dry crops and with different varieties of exotic paddy and trials were also made with cotton, Bengal gram, some exotic vegetables, potatoes and tapioca. The Agricultural Department continued its educative efforts and the measures to combat mahali disease of the arecanut trees and the coconut leaf disease. Twelve co-operative societies, or three less than in the previous year, were registered. As in the previous year most of the loans issued by agricultural societies were for productive and useful purposes and these amounted to Rs. 1·44 lakhs as against Rs. 0·83 lakh in M.E. 1093. The State forests continued to be worked generally on the contract system by departmental agency. The growth in the plantations of teak, sandalwood, camphor and other plants was generally good. There was no change in the total length of the permanent way opened up for traffic. The cost of maintenance amounted to Rs. 1·07 lakhs as against Rs. 1·04 lakhs in the previous year and the total expenditure of the department slightly exceeded that of the previous year. The expenditure on State works including establishment charges was Rs. 7·64 lakhs as against Rs. 6·68 lakhs in the previous year. The Special Engineer employed to investigate the various irrigation and drainage possibilities of the State has completed the work but the report had not been received before the year closed. The gross earnings of the State Railway amounted to Rs. 8·92 lakhs which is slightly in excess of the previous year's figure and the net earnings gave a return of 5·66 per cent on the capital outlay as against 6·36 per cent in the previous year.

Production and distribution

Land revenue

Agriculture

Co-operative societies

Forests

Tramway

Public works

Railway

21. The total number of births registered during the year fell further, by 1,584, to 13,742 while the number of deaths rose, by 6,265, to 20,112. The ratios of births and deaths per mille of the population were 14·97 and 21·91, respectively, as against 16·69 and 15·08 in the previous year. Mortality from cholera and smallpox was again high. There was no change in the number of medical institutions in the State. Public health was not satisfactory and the total number of patients treated in these institutions rose, by 19,648, to 284,559. The number of in-patients treated rose, by over 800, to 6,770.

Vital statistics and medical services

Medical relief

22. The total number of Sirkar schools rose from 145 to 163 and that of aided schools from 209 to 236 : and the total number of pupils in both classes of institutions rose further, by 4,656, to 67,090. The number of High schools rose from 19 to 25, of which 18 were Sirkar institutions as against 12 in the previous year. There was no change in the number (7) of aided institutions. The total number of pupils who were given Upper Secondary education rose, by 240, to 2,214. The number of schools in which Lower Secondary instruction was imparted rose from 45 to 53, of which 31 were Sirkar and 22 aided, as against 25 and 20, respectively, in the previous year. Primary education was imparted in 953 schools as against 914 in the previous year.

Education

PUDUKKŌTTAI STATE

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Report on the administration of Pudukkottai for fasli* 1329]

[The Raja, His Highness Sri Brihadamba Das Raja Sir Martanda Bhairava Tondaiman Bahadur, G.C.I.E., is a Kallar by caste and is 44 years of age. The population of the State, according to the census of 1911, is 411,878. The Raja pays no tribute and maintains a military force of 110 infantry and 19 cavalry. The Collector of Trichinopoly is ex-officio Political Agent for the State]

General and political

23. His Highness the Raja returned to India about the middle of September 1919, and proceeded to England some weeks later.

Revenue and finance

Land revenue

24. The total receipts of the fasli amounted to Rs. 21·25 lakhs, an increase of Rs. 0·42 lakh over the figures of the previous year, contributed chiefly by Land Revenue and Stamps. The current demand under Land Revenue was Rs. 9·96 lakhs as against Rs. 9·85 lakhs in the previous year and the percentage of collection increased from 98·66 to 98·81. The total expenditure rose from Rs. 16·63 lakhs to Rs. 18·14 lakhs, increasing under almost all the principal heads. The transactions of the fasli thus resulted in a net surplus of Rs. 3·11 lakhs. The opening balance was Rs. 35·14 lakhs and the closing balance Rs. 38·25 lakhs. The surplus went to increase the State's investments in war bonds and fixed deposits in the Bank of Madras.

Production and distribution

Season and crops

25. The season was, on the whole, fair from an agricultural point of view. The total rainfall was 50·96 inches as against 28·48 inches in the previous year and an average of 33·14 inches for the last five years. Some damage was done by excessive rainfall in December and January ; the outturn was however generally fair and the harvest of dry crops was particularly good. The prices of the staple food-grains were abnormally high except in the case of cumbu and cholam. Pasture was available everywhere and fodder was available, but at high prices. The condition of cattle was good. A net area of 2,701 acres was added during the year to ryotwari holdings. Some useful work was done by the Agricultural Department and the ryots have begun to appreciate it ; but the extension of new methods is very slow. Five new co-operative credit societies were registered during the year, thus increasing their total number to 35.

Protection and legislation

26. The Legislative Advisory Council met twice during the year and considered three draft Regulations. Four Regulations were passed during the fasli. The eighteenth session of the Representative Assembly met in February 1920 when 26 out of the 30 members were present.

Police

There were 333 interpellations and 14 suggestions. There was practically no change in the constitution of the State Police force which at the close of the fasli was 20 short of its full strength.

Criminal justice

The total number of offences of all kinds reported fell from 2,076 to 1,935. The percentage of detection fell further from 78 to 74. There was a fall, from 742 to 670, in the number of cases under the Penal Code. The total number of cases for disposal in magistrates' courts rose, by 523, to 4,787, of which 91·85 per cent were disposed of as against 94·54 per cent in the preceding fasli. The average duration of cases rose from 13·16 to 15·14 days.

Prisons

The work of the Sessions Court, the Chief Magistrate's Court and the Chief Court continued to be satisfactory. The total jail population including the year's admissions numbered 461, of which 362 were discharged, leaving at the close of the fasli 99 prisoners consisting of 75 convicts, 18 undertrial prisoners 5 civil prisoners and 1 lunatic. The health of the prisoners was good and the daily average of the sick fell from 1·91 to 1·77. There was a perceptible improvement in the discipline in the Central Jail.

Civil justice

The volume of fresh litigation increased by 7·28 per cent. The total number of original suits for disposal including the previous year's pendency was 3,160 against 2,933 in the previous year. The percentage of disposal rose from 78·28 to 80·60 and a balance of 613 suits was left against 637 at the close of the previous fasli. There was also a slight improvement in the

percentage of disposal of small cause suits. In the case of regular appeals the percentage of disposal was higher, viz., 72·72 against 59·52.

Vital statistics and medical services

27. Public health was generally good throughout he fasli, though cholera and smallpox were, as usual, prevalent sporadically. The total number of births registered during the year was 8,548 or 20·75 per mille of the population as against 20·85 per mille in the previous fasli. The total number of deaths was 8,923 or 21·66 per mille of population as against 29·88 in the previous fasli. The total number of patients who underwent treatment in all the medical institutions was 123,244 as against 127,425 in the previous fasli and there was no noticeable variation in the daily average attendance. The work of the Vaccination department continued to be unsatisfactory.

Education

28. The number of the educational institutions at work in the State increased, by 28, to 480 and the number of pupils under instruction, by 467, to 24,263. There was one school for every 2·45 square miles and for every 858 of the population. Elementary education is free throughout the State except for boys at the capital. During the fasli under report, sufficient importance was not attached to the inspection of schools. In accordance with the wishes of the Representative Assembly members, a committee of officials and non-officials was formed in the latter half of the fasli to consider and report on the question of introducing free and compulsory education in the State and of the best method of promoting education among the rural masses. The report of the University Commission who inspected the college in 1918 was received in October and the defects pointed out by them have been remedied.

BANGANAPALLE STATE

[*Administration Report of the Banganapalle State for the official year* 1919–20]

[Nawab Saiyid Ghulam 'Ali Khan Bahadur, a Muhammadan of the Shiah sect, is the ruler of the State. He is 46 years old and has male heirs. He pays no tribute and maintains no military force. He holds a commission as a Lieutenant in His Majesty's land forces. The population of the State is 39,356 (1911 census). The Collector of Kurnool is Political Agent]

General and political

29. The Nawab visited His Excellency Lord Willingdon at Government House, Madras, on the 27th February 1920 and earlier in the year had to go to Ajmere to see his son who was ill. His eldest son, Mir Fazle Ali Khan Bahadur, continued to make very good progress at the Mayo College, Ajmere. The second and third sons, Mir Inayath Ali Khan and Mir Fateh Ali Khan, who were also admitted last year in the same college, were well reported on. The crops were generally good and the high prices of food-grains that prevailed throughout the year were of immense advantage to the agriculturists. Cholam, the staple food-grain, was sold from 6 to 7½ seers per rupee. The rainfall was 30·85 inches as against 12·36 inches in the previous year, the average of the past five years being 30·92 inches.

Revenue and finance

30. The total receipts during the year were Rs. 2·65 lakhs as against Rs. 2·82 lakhs in the previous year. Decreases occurred principally under "Land Revenue and Miscellaneous" and "Abkāri and Opium." Under the first-named head the fall was due to slow collections consequent on the dullness of the cotton market; under the latter head there was no real decrease; but under a new arrangement by which the British authorities manage the abkāri revenue and hand over the net proceeds to the Darbar there is necessarily some delay in adjusting the accounts. The total expenditure fell slightly from Rs. 2·69 lakhs to Rs. 2·64 lakhs.

Protection and legislation

31. The administration of the police continued to be efficient and, though detection was poor, preventive work was carried on efficiently. Highroad beats and beats to ghat villages were regular. There was a considerable fall in the value of property stolen, but the percentage of recovery fell from 25·57 to 15·7.

Vital statistics and medical services

32. Public health was good throughout the year and there were no epidemic diseases. Eight hundred and fifty-five births were registered as against 591 in the previous year and the number of deaths fell from 2,970 to 865. The dispensary and hospital were freely resorted to by patients resident in the State as well as by people from the surrounding British villages. The average number of out-patients treated during the year was 85·13 and in-patients 9·01 making a total of 94·14 against 115·58 in the previous year.

Education

33. There was a slight rise in the total strength of the State schools and the results of the annual examination were encouraging, the percentage of passes being 72·3 as against 63·7 in the previous year. The results of the aided schools also showed improvement over last year. In addition to the two trained teachers entertained in the previous year for the Hindu Girls' school, one more highly qualified trained teacher was entertained for the Muslim Girls' school.

SANDUR STATE

[*Administration Report of the Sandur State for the official year* 1919–20]

[The Raja of Sandur, Raja Srimant Venkata Rao, Rao Sahib, Hindu Rao, Ghorapade Mamlukatmadar, Senapati, is a Mahratta. He is 28 years of age. He pays no tribute and maintains no military force. The population of the State is 13,517 (1911 census). The Collector of Bellary is ex-officio Political Agent and exercises a general supervision over the administration]

General and political

34. The administration of the State remained in the hands of the Diwan subject to the control of the Political Agent until the 17th January 1920, when it was restored to the Jaghirdar. Since that date the Raja has taken direct control of certain subjects, has toured round the southern portion of the State and otherwise taken steps to acquaint himself with the methods of administration. There was a reorganization of the Police and Educational departments involving a small increase in the emoluments of the officers concerned.

Revenue and finance

35. The receipts from all sources amounted to nearly a lakh and the expenditure slightly exceeded this amount, the corresponding figures for the previous year being Rs. 1·03 lakhs and Rs. 0·67 lakh. No revenue was derived from mines. A part of the Raja's private debts was paid from the State balances.

Protection

36. Out of 39 offences committed 18 were undetected and 8 were pending investigation at the end of the year. The value of the property lost during the year rose from Rs. 1,650 to Rs. 3,854 and the percentage of recovery fell from 12·20 to 5·38. The Diwan exercised first-class magisterial powers as usual, and under instructions of the Government, also the powers of Additional Sessions Judge. He dealt with 88 cases during the

Courts

year against 137 in the previous year, the number of cases instituted on complaint by private persons being fewer owing to the unfavourable character of the season. Out of 219 persons involved, 132 were convicted and 87 were acquitted or discharged. None were pending trial at the end of the year. As District Munsif the Diwan dealt with 66 cases as against 50 in the previous year and disposed of 52. Three appeals were dealt

Jail

with in the Political Agent's Court. The expenditure on the maintenance of the State prison was Rs. 361 as against Rs. 405 in the previous year. The earnings of the prisoners amounted to Rs. 128 as against Rs. 292.

Production and distribution

37. The rainfall amounted to 43·98 inches against 24·86 inches in the previous year, the average for the five years preceding being 35·54: but though plentiful it was not seasonable and the average yield of cholam, which is the principal staple food in the State, was 8 to 12 annas. The labouring classes were mostly employed in agricultural operations and in grass and fuel cutting in forests and fairly moderate wages were earned by them. Since the closure of the manganese mines on the outbreak of the war, the labouring classes have depended entirely on grass

and fuel cutting in the non-agricultural season, though many add to their resources by helping in the paddy and sugarcane harvests in the adjoining Hospet taluk. The local supply of food-grains continued to be deficient and though the restrictions on export till then prevailing were removed in January 1920, they were afterwards reimposed. The total forest revenue amounted to Rs. 29,436 against Rs. 25,604 in the previous year.

Vital statistics and medical services

38. The health of the people was on the whole good. The number of births and deaths during the year were 365 and 382 against 375 and 1,186 respectively in the previous year. The ratio of births and deaths per mille was 27 and 28 respectively against 28 and 87 in the previous year. In the State Dispensary at Sandur 9,474 persons received relief against 11,272 in the previous year, the average daily attendance of the old and new cases being 74·36 against 89·60. The diseases treated were mostly fever, respiratory affections and disorders of the digestive system. A midwife trained both in maternity and sick nursing was appointed and she conducted 35 labour cases against 97 in the previous year.

Education

39. The number of children on the school rolls on the 31st March was 423 against 414 in the previous year. School fees were abolished in all village schools and education was made free with effect from 1st April. Mahratti was made a compulsory language in the Jubilee School at Sandur.

CONDITION OF THE PEOPLE

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Season and Crop Report for fasli* 1329 ; *Department of Statistics, India ; Prices and wages in India*]

40. In spite of the better season the supply of locally grown grain was generally low during the year and the price of food-grains remained at a high level in sympathy with world prices. The harvest prices of the principal food-grains were dearer than in the preceding fasli except those of rice in four districts, of cholam in five, of cumbu in two and of ragi in one. The shortage of rice was as in the previous year made good by imports from Burma and Bengal and there was a marked rise in the net imports of both paddy and rice, while a considerable fall occurred in the net export trade of cumbu and cholam. The continuance of the slump in the price of cotton was one of the chief features of the year. Under the stimulus of record prices the maximum area was devoted to the cultivation of this commercial crop in the preceding fasli. The inevitable reaction followed and during fasli 1329 there was a reduction of 25 per cent in this area. The price which went down from Rs. 580 per candy of 500 lb. in September 1918 to Rs. 320 in April 1919 fell still further to Rs. 280 in June 1920 and to Rs. 230 in October. The efforts to make up for the shortage of food grains and their high prices as contrasted with the declining prices of cotton tended still further to restrict the area under cotton. An additional reason was the enforcement of the Pest Act in respect of Cambodia cotton in Coimbatore district. In spite of the fall in price there was a slight increase in the export of cotton owing to the large quantities in stock, but ryots generally held up stocks in the hope of better prices with the result that in certain districts large stocks of old cotton remained unsold. Consequent on the removal of trade restrictions and a fall in freight the export of groundnut to foreign countries was resumed, but the quantity exported was only just over a third of the foreign export of this article before the war. The price per candy of 500 lb. varied with the demand and with the exchange : from Rs. 75 in April 1919 it rose to Rs. 108 in July and after fluctuations fell to Rs. 62 towards the end of the fasli. The demand for castor practically disappeared with the war. There was an increase of 30 per cent in the area under gingelly and exports nearly trebled in quantity. Owing to shortage

of water at the planting season the area under sugarcane fell by 25 per cent : and the abnormal rise in the price of Java sugar and the shortage in the supplies of European beet sugar sent up the price of cane jaggery from Rs. 30 per candy of 500 lb. in March 1919 to Rs. 90 in February 1920. Coconut oil was in larger demand for the soap factories on the West Coast. The price of coconuts was high and the trade in copra revived. Everywhere the process of readjustment to the altered conditions of life was going on. The conviction has been forced on the minds of men that the higher prices have come to stay and no one hopes for a sudden fall in prices to anything like the pre-war rates. The wages of labour have readjusted themselves so that the labourer commands almost the same purchasing power as before the war. All classes of the agricultural population participated in this change and were everywhere living in greater comfort than before.

POLITICAL PENSIONS (1919)

41. The political pensions in force on the 1st January 1919 amounted to Rs. 2,69,275-13-0 and were distributed among 467 pensioners. During the year pensions amounting to Rs. 23,772-13-0 were either newly sanctioned or were transferred from other provinces and pensions amounting to Rs. 24,879-10-0 either lapsed or were transferred to other provinces. Thirty-seven pensioners died during the year and 33 new pensioners were added to the list. The pensions of two pensioners were commuted in full, and those of two others were transferred to Hyderabad. The pensions in force on the 1st January 1920 amounted to Rs. 2,68,169-0-0 and were distributed among 459 pensioners. The payments made to Carnatic stipendiaries and to the Tanjore family aggregated Rs. 2,02,451-8-10 and Rs. 31,419-8-1, respectively. The former amount includes the commuted value of the pensions referred to above.

CHAPTER II

ADMINISTRATION OF THE LAND

REALIZATION OF LAND REVENUE

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Report on the settlement of Land Revenue for fasli* 1328; *Statistics of British India, Vol. II—Financial Statistics, Part II—Land Revenue*]

Sources of land revenue

42. The total current demand under Land Revenue and Cesses amounted to Rs. 761·13 lakhs as against Rs. 784·35 lakhs in the previous fasli, of which 97 per cent was collected within the fasli as against 98·3 per cent in the previous year. The revenue from peshkash amounted to Rs. 49·89 lakhs as against Rs. 49·92 lakhs in the previous fasli and that from shrotriyam jodi remained almost the same as in the previous year (Rs. 7·56 lakhs). The net ryotwari demand, excluding remissions but including water-rate, second crop charge and miscellaneous revenue, fell, by Rs. 23·19 lakhs, to Rs. 622·38 lakhs. The total extent of ryotwari holdings was 25·97 million acres, or about 78,000 acres more than in the previous year. The increase was contributed by all the districts excepting Cuddapah, Kurnool and Salem and was marked in South Arcot, and also in Anantapur and South Kanara as in previous years. The total assessment on holdings again rose, by Rs. 8·54 lakhs, to Rs. 531·14 lakhs, the increase having been contributed by all the districts excepting Cuddapah and Kurnool. The total area cropped on ryotwari holdings showed a further decrease of 978,397 acres under dry and 243,987 acres under wet. Including the area under "Miscellaneous cultivation" the total area cropped amounted to 19·96 million acres as against 21·53 million acres in the previous year. The revenue from water-rate and second-crop charge fell, by Rs. 8·48 lakhs, to Rs. 30·92 lakhs. There were increases under both "Season" and "Fixed" remissions and also under "Beriz deductions," resulting in a total increase of Rs. 20·77 lakhs. The receipts under "Miscellaneous revenue" fell, by Rs. 2·48 lakhs, to Rs. 95·54 lakhs. The current demand under cesses was slightly in excess of Rs. 75 lakhs and was much the same as in the previous year. The total balance of land revenue and cesses outstanding at the end of the fasli including both arrears and current was Rs. 23·51 lakhs as against Rs. 13·40 lakhs in the previous fasli.

Peshkash

Shrotriyam jodi

Ryotwari

Remissions and beriz deductions

Miscellaneous revenue

Cesses

Collections

43. Up to the end of January 1920, Rs. 20·30 lakhs had been collected and the net recoverable balance on 1st February 1920 was Rs. 2·61 lakhs. The charges of district administration, including salaries and allowances of revenue inspectors but excluding those of village establishments, were Rs. 57·37 lakhs, or 7·8 per cent of the land revenue and cesses realized as against 6·8 per cent in the previous year. Including village service charges, which amounted to Rs. 70·09 lakhs, the total charges amounted to Rs. 127·47 lakhs, or 17·3 per cent of the collections of land revenue and cesses as against 13·9 per cent in the previous year.

Coercive processes

44. There was a further decrease, by 52,625, to 964,133, in the number of coercive processes issued for the realization of Government dues. The number of distraints and attachments rose, by 17,927, to 89,868. There was a further increase, from 8·05 to 10·76, in the percentage borne by the number of distraints and attachments to that of demand notices. The number of defaulters whose immovable property was attached rose, by 6,081, to 16,833 : but there was a very satisfactory rise, from 36·45 to 61·22,

in the percentage of those who paid the arrears before the sale notices were issued and a fall in the number of defaulters whose property was actually sold. Immovable property of the estimated value of Rs. 2·40 lakhs was sold for the recovery of arrears amounting Rs. 0·49 lakh, and realized Rs. 0·85 lakh, the corresponding figures for the previous year being Rs. 1·52 lakhs, Rs. 0·37 lakh and Rs. 0·58 lakh. The total area of dry lands bought in by Government for want of bidders increased, by 3,475 acres, to 5,567 acres, but there was no appreciable change in the total area of wet lands so bought in which amounted to a little over 450 acres.

Transfer of registration

45. Applications for transfer of revenue registration received through officers of the Registration Department increased, by 22,097, or 8·09 per cent, to 295,028 : those presented direct to Revenue Officers numbered 54,501, or much the same figure as in the previous year : and the number of cases which Revenue Officers dealt with on their own initiative fell, by 1,750, to 11,375. The total number of applications for disposal including the previous year's pendency was 489,349, of which 154,200 were left pending at the close of the fasli as against 118,277 in the previous fasli. Of the number disposed of, 14,903, or 4·44 per cent, were rejected.

Loans and advances

46. A sum of Rs. 10·39 lakhs was advanced, as against Rs. 8·25 lakhs in the previous fasli, under the Land Improvement Loans Act and the Agriculturists' Loans Act. Of the sums repayable during the year under these Acts on account of principal, 84·9 per cent under the former and 77·9 per cent under the latter were collected as against 88·5 and 83·3 per cent in the previous year. The aggregate amount of principal and interest repayable under both the Acts was Rs. 12·76 lakhs as against Rs. 11·49 lakhs in the previous fasli, of which 26·6 per cent was collected without resort to coercion and 48·3 per cent after the issue of demand, the percentages for the previous fasli being 30·1 and 50·6, respectively. The balance outstanding at the end of the year was Rs. 2·42 lakhs as against Rs. 1·57 lakhs in the previous fasli. Towards the close of the fasli the general rules framed under the Loans Acts were revised so as to allow the grant of a consolidated loan or of more loans than one under the two Acts on a single security, provided the value of the security was sufficient to cover the whole loan.

SURVEYS (1919–20)

[*Report on the administration of the Survey, Settlement and Land Records Departments for the year* 1919–20 (*G.O. No.* 2794, *Revenue, dated the 22nd November* 1920)]

Operations

47. As in previous years, the strength of survey parties stood at six, No. II party continuing on estate surveys, and the rest on resurveys. No. I party was at work chiefly in Guntūr, Nos. III and V parties in South Arcot, No. IV party in Trichinopoly and Tanjore, and No. VI party in Tanjore. The town survey detachment of No. I party was as in preceding years employed in the Circars.

Parties

District operations

No. I party

48. The cadastral section of No. I party completed the resurveys ordered in Guntūr district, crediting during the year 4 and 320 square miles, respectively, in Rēpalle and Bāpatla taluks, and commenced preliminaries in the Razole taluk of the Gōdāvari district. In Guntūr, street survey was finished in 25 unions and was in progress in four others, and 57 linear miles of Local Fund roads were also surveyed. In Vizagapatam, the remaining 12 square miles in unsettled villages were surveyed. In Ganjām, the survey of 72 linear miles of Local Fund roads and of streets in ten unions was completed. The town survey section of the party completed the survey of the towns of Vizagapatam, Tenali, Narasaraopet, Bezwada and Peddāpur and was at work in Rajahmundry and Bimlipatam towns at the end of the year, having credited in all 7·74 square miles.

No. II party

No. II party completed the survey of Venkatagiri zamindari, crediting 146 square miles during the year, and surveyed 106 square miles

in the Kangundi zamindari and 20·7 square miles of estates scattered in Chittoor and Kistna. One hundred and thirty-seven linear miles of Local Fund roads in Karvetnagar zamindari and Arni Jaghir were also measured. No. III party completed Kallakurchi taluk, crediting 285 square miles in the year, and resurveyed 70 square miles in Vriddhachalam taluk of South Arcot district. Street surveys were also finished in five unions of the district. In Madura, the party carried out the survey of Kilmattur inam, 0·9 square mile in extent. No. IV party completed the resurvey of the remaining two square miles in Tiruvannāmalai taluk (North Arcot district) and 33 square miles in Lālgudi (Trichinopoly) and 78 square miles in Arantāngi (Tanjore). The resurvey of Musiri (Trichinopoly) and Tirutturaippūndi (Tanjore) was then taken up, and 148 square miles in the former and 52 square miles in the latter were credited. Three square miles of disafforested blocks in the Trichinopoly district were also surveyed. The party carried out in Madura the block survey of whole inam villages aggregating 17 square miles, and in Rāmnād the cadastral survey of 1·6 square miles in three proprietary villages, besides the street surveys of seven unions in the latter district. In Tinnevelly 781 subdivisions with an area of seven square miles were measured in Nambipuram and Magiladi inam villages. No. V party completed Tirukkōyilūr taluk crediting 86 square miles and resurveyed 230 square miles in Chidambaram taluk, South Arcot district. Nearly two square miles in Pillali estate in Cuddalore taluk were also surveyed. Street surveys in two unions of the district were completed, and were in progress in four others. The resurvey of Shiyāli taluk, Tanjore district, was also commenced at the end of the year, and one square mile credited. The operations of No. VI party were confined to the Tanjore district, wherein it completed the resurvey of Nannilam and Negapatam taluks, crediting 257 square miles in all. The resumed inam village of Kottaiyur, 0·6 square mile, was also surveyed. Survey of streets was completed in four unions of the district.

No. III party

No. IV party

No. V party

No. VI party

49. The area for which village maps were printed during the year was 3,509 square miles (including 498 square miles of proprietary villages). The arrears of printing at the end of the year were 1,612 square miles as against 2,139 square miles in the previous year. Other maps printed during the year included revised touring maps (quinquennial issue) of Chingleput, North Arcot and Trichinopoly districts, reprints of two district touring maps and three taluk maps, all on the basis of the Survey of India one inch standard sheets, and reprints of six other taluk maps and street survey maps of 24 unions.

Central Office

50. The total field outturn for the year comprised the initial survey of 15·6 square miles of Government lands and 277·8 square miles of estates, the resurvey of 1,566 square miles of Government lands, the block survey of 17 square miles of whole inam villages and the special cadastral surveys of 7·74 square miles of municipal towns, besides the survey of streets in 53 unions and 266 linear miles of roads. Karnams' contribution to the year's outturn was insignificant, and their employment on surveys has since been given up.

Outturn

51. The gross expenditure was Rs. 13·66 lakhs as against Rs. 13·08 lakhs in the preceding year—of which Rs. 10·52 lakhs is chargeable to Government and Rs. 3·14 lakhs to proprietary estates, municipalities, and other sources, the corresponding figures for the previous year being Rs. 9·62 lakhs and Rs. 3·45 lakhs, respectively. The amount chargeable to outturn was Rs. 12·33 lakhs as against Rs. 11·86 lakhs in the previous year.

Finance

SETTLEMENTS (1919–20)

[*G.O. No.* 2794, *Revenue, dated the* 22*nd November* 1920]

Parties

52. All the five settlement parties which were at work at the end of the previous year continued their operations during the year under report, party No. I in the Tanjore district, party No. II in the South Arcot district and in the Tiruvannāmalai taluk of the North Arcot district, party No. III in Bellary and Anantapur, party No. IV in Madura, Rāmnād and Trichinopoly and party No. V in Ganjām, Vizagapatam, Gōdāvari and Kistna. The Special Settlement Officer employed in connexion with the resettlement of the Nilgiri and Malabar Wynaads continued to work throughout the year.

Districts

Ganjām

53. In Ganjām, the issue of rough pattas and the hearing of objections thereto were completed in the Pondakhol mutta and the fair accounts handed over to the Revenue Department. The introduction of the new rates was, however, postponed till the ensuing year. Draft inam registers for the paiks' inams in the five villages of the Pālūru estate were made over to the Collector. The draft notification for the settlement of the resumed inam villages of Balajipuram was approved by Government and the work was completed. The village settlement register and memoir were submitted to the Board. The fair adangal relating to the Runkuhanumantapuram reserve in the Chicacole taluk was prepared and

Vizagapatam

supplied to the Collector. In Vizagapatam the work remaining to be done in connexion with the survey of subdivisions was completed. The draft notification for the resettlement of the three Government taluks of the district was approved by Government and published. Field inspection with reference to the miscellaneous accounts preliminary to the introduction of resettlement was completed in all the taluks. Rough pattas were prepared and issued for all the villages of the Palkonda and Sarvasiddhi taluks and for 68 of the 76 villages of the Golgonda taluk. The hearing of objections to rough pattas was also completed in all the villages of the Palkonda and Sarvasiddhi taluks and in 60 villages of the Golgonda taluk. The report on the introduction of settlement rates in the 772 whole inam villages in the Vizagapatam district was submitted to the Board. The survey and classification of the whole inam village of Sivarāmapuram for the better assessment of land cess was completed

Bellary

during the year. In Bellary, the revision of adangals was completed in four shrotriyam villages in the Adōni taluk, 40 ryotwari and six shrotriyam villages in the Ālūr taluk, 96 ryotwari and two shrotriyam villages in the Siruguppa taluk and 26 ryotwari and one shrotriyam village in the Bellary taluk. Subdivisions were measured in ten shrotriyam villages in the Adōni taluk, 52 ryotwari and four shrotriyam villages in the Ālūr taluk

Anantapur

and 41 ryotwari villages of the Siruguppa taluk. In the Anantapur district the revision of adangals was completed in 116 ryotwari and seven shrotriyam villages of the Gooty taluk and 13 ryotwari villages of the Tadpatri taluk. The scheme report for the resettlement of the taluks of Adōni and Ālūr, Siruguppa and Bellary in the Bellary district and Gooty and Tadpatri in the Anantapur district was drawn up by the Special Settlement Officer. The collection of statistics required for the scheme report of the red soil taluks of the Bellary district was commenced in the year.

North Arcot

In North Arcot the settlement of the Tenmalai Hill villages in the Tiruvannāmalai taluk was in progress. Inspection by officers preliminary to the introduction of resettlement was completed in 332 villages of the Tiruvannāmalai taluk. Rough pattas were issued and objections heard in 247 villages. The fair accounts of 110 villages were handed over to the

South Arcot

Revenue Department. In South Arcot the revision of adangals was completed in 136 villages of the Vriddhachalam taluk and the records of 67 villages were handed over to the Survey Department. The final scrutiny of the survey records was completed in 170 villages of the Tirukkōyilūr taluk and 79 villages of the Kallakurchi taluk. Rough pattas were issued and objections heard in the remaining 129 villages of the Gingee taluk.

Fair accounts were furnished to the Revenue Department for the remaining villages of the Villupuram and Tindivanam taluks and for the whole of the Gingee taluk. Village settlement registers for 165 villages of the Cuddalore taluk, for all the villages of the Villupuram taluk, and 105 villages of the Tindivanam taluk were prepared during the year and those of 209 villages of the Cuddalore taluk and 191 villages of the Villupuram taluk were submitted to the Board. The report on the introduction of resettlement rates in the Cuddalore taluk was submitted to Government and the collection of statistics for a similar report for the taluks of Villupuram, Tindivanam and Gingee was in progress. In Tanjore the Tanjore revision of adangals was completed in the remaining four and 26 villages of the Negapatam and Arantāngi taluks, respectively, in all the villages of the Tirutturaippūndi taluk, in 78 villages in each of the taluks of Shiyāli and Pāpanāsam, in the 30 remaining villages of the Tanjore taluk (North) and 19 villages of the Kumbakōnam taluk. The final scrutiny of the survey records was carried out in ten villages left unfinished in the Mannārgudi taluk, in 38 villages of the Tanjore taluk (South), in eight villages of Pāpanāsam, in 145 villages of Nannilam, in 11 villages of Negapatam and in 23 villages of Arantāngi. The fair accounts of 123 villages in the Mannārgudi taluk, 33 in Tanjore (South) and two in Pāpanāsam were handed over to the Revenue Department. The fair accounts of one village of the Mannārgudi municipality, four villages of the Māyavaram municipality, eight of the Kumbakōnam municipality and five of the Negapatam municipality were furnished to the Revenue Department. In Trichi- Trichinopoly nopoly the revision of adangals started towards the close of last year in the Lālgudi taluk was completed in the year under review. Similar work was begun in the Musiri taluk and completed in two villages. In Madura, objections to rough pattas were heard in the remaining four Madura villages of the Mēlūr taluk. The fair accounts were transmitted to the Revenue Department for the remaining 57, 52 and 81 villages, respectively, of the Madura, Mēlūr and Tirumangalam taluks. The number of villages for which settlement registers were prepared was 406, of which 387 were checked and 370 were submitted to the Board. Reports on the introduction of resettlement rates were submitted to Government in respect of the taluks of Periyakulam, Nilakkōttai and Tirumangalam. In Rāmnād, rough pattas were issued and objections heard Rāmnād in all the eight villages of the Aruppukkōttai taluk. The fair accounts of these villages were also transmitted to the Revenue Department and a report on the introduction of resettlement was submitted to Government. Village settlement registers were prepared and checked for all the eight villages of which the registers for seven villages were submitted to the Board. In the Nilgiri and Malabar Wynaads, the revision of the records The Nilgiris of the desams already dealt with by the special staff and the additional Malabar field work begun last year were completed. Progress in the revision of adangals and classification work was continued in the Wynaad taluk. Field work was completed in 13 desams and record work was approaching completion towards the end of the year in ten desams. Proposals for the revision of ground-rents in the Nilgiris were submitted to Government.

54. During the year 747 manuscript registers were received, 461 were **Registers** scrutinized, 243 were printed and 304 issued to Collectors.

55. The total expenditure was Rs. 6·57 lakhs as against Rs. 5·75 lakhs in **Finance** the previous year. A sum of Rs. 1·63 lakhs was spent on the controlling office as against Rs. 1·47 lakhs in 1918–19. The cost of printing and binding settlement registers increased from Rs. 0·05 lakh to Rs. 0·18 lakh and the expenditure on settlement parties rose from Rs. 4·23 lakhs to Rs. 4·76 lakhs.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

LAND RECORDS (1919–20)

[*G.O. No.* 2794, *Revenue, dated the 22nd November* 1920]

General

56. Land Records staffs were working throughout the year in all the districts of the Presidency. They were mainly employed on regular maintenance except in the districts of South Arcot and Tanjore, in the Tiruvannāmalai taluk of North Arcot and in the Tenali, Repalle and Bapatla taluks of Guntūr. Some of the excepted areas were ready for the introduction of maintenance on completion of their resurvey, while in others resurvey operations were started or were in progress during the year.

Maintenance

57. There was a slight increase in the number of subdivisions sanctioned while a considerable increase occurred in the number remaining to be dealt with at the end of the year. The bulk of the pendency was with Revenue Inspectors for "check measurement." Firka Revenue Inspectors could not devote as much attention to this branch of the work as was necessary. The recent increase in their number and the consequent reduction in the size of the firkas would, it is hoped, permit them to pay better attention to subdivision work. There was an appreciable reduction in the balance of survey marks requiring attention at the end of the year. A number of towns were newly surveyed and the question of maintaining their surveys was receiving attention. The number of surveyed unions increased and maintenance of these surveys was newly started during the year.

Training of staff

58. A school for the training of Land Records Tahsildars in survey and maintenance was held at Pallavaram in the Chingleput district. Schools for the training of Revenue subordinates and karnams were also held as usual in various districts.

WASTE LANDS

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Season and Crop Report for the agricultural year* 1919–20]

59. The total area of the Presidency is 89·760 million acres as against 89·649 million acres in the previous year, of which a net extent of 33·105 million acres was under cultivation as against 31·770 million acres in the preceding fasli. The area classed as forest increased from 12·945 million acres to 13·155 million acres while 21·751 million acres, or 0·251 million acres less than in the previous year, were not available for cultivation. Of the remainder 9·876 million acres were fallow and 11·874 million acres formed culturable waste other than fallow as against 10·587 million acres and 12·346 million acres, respectively, in the previous fasli.

GOVERNMENT ESTATES.

60. There is nothing to record under this head.

WARDS' ESTATES

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Report on the administration of the estates under the Court of Wards in the Madras Presidency for fasli* 1328 (1918–19)]

Estates under management.

61. Twenty estates were under the Court's management at the end of fasli 1327. The Kangundi estate in North Arcot was handed over to its proprietor in December 1918 on his attaining majority. The Mannārkōttai estate in Rāmnād was taken over in December 1918 and the

Rāmapatnam estate in Coimbatore in January 1919, the proprietors being minors. The number of estates under the Court's superintendence at the end of fasli 1328 was, therefore, twenty-one. The number of pupils in residence at Newington at the end of the fasli was nine.

Finance

62. Of the total current demand of Rs. 32·33 lakhs, Rs. 26·19 lakhs were collected and Rs. 0·31 lakh written off, leaving a balance of Rs. 5·83 lakhs at the close of the fasli. Deducting collections, remissions and amounts recommended to be written off, the net recoverable balance amounted to Rs. 4·66 lakhs, or 14·4 per cent of the demand, against 9·08 per cent in the previous year. In nine estates, the balance was less than 5 per cent of the demand; in three, it was between 5 and 10 per cent; and in four, between 10 and 25 per cent. The balance exceeded 25 per cent in the remaining five estates. The total arrear demand at the beginning of the fasli amounted to Rs. 10·72 lakhs, of which Rs. 5·16 lakhs were outstanding at its close. There were no outstanding balances in four estates. The arrears exceeded Rs. 15,000 in five estates. The aggregate cash balance of all the estates (excluding Kangundi), at the beginning of the fasli, was Rs. 6·70 lakhs. The total cash receipts of the estates during the year amounted to Rs. 35·25 lakhs. The total assets of the fasli in cash were therefore Rs. 41·95 lakhs. The total expenditure during the fasli amounted to Rs. 33·79 lakhs, leaving a cash balance of Rs. 8·16 lakhs at its close. Including Government promissory notes and other securities and the estimated value of grain on hand, the total closing balance to the credit of the estates was Rs. 15·02 lakhs. The ordinary cash receipts and charges amounted to Rs. 27·61 lakhs and Rs. 20·38 lakhs against Rs. 20·78 lakhs and Rs. 15·63 lakhs in the preceding year. Surplus balances exceeding a lakh of rupees were at the end of the year held on behalf of Kallikōta-Atagāda, Sāptūr, Sivaganga, Ūrkkādu and Ūttumalai. The two schemes for the construction of large reservoirs in Kallikōta-Atagāda, referred to in the previous year's report, were investigated. In Sāptūr, Sivaganga, Ūrkkādu and Ūttumalai, the bulk of the balance was invested in the Indian War Loans. The remaining surplus in Sāptūr was reserved for the construction of wells in pannai lands, for the opening of an agricultural farm and for meeting the expenses of the marriage of the ward's youngest sister. The surplus in Sivaganga will be utilized in the survey of the estate, which has been recently sanctioned by Government. The average percentage for all the estates of the establishment charges and Government commission to normal receipts rose further from 16·5 to 17·7. Taking the estates individually, the percentage exceeded the prescribed maximum of 12 in all the estates except three. In most of them it was not possible to curtail the establishment charges without impairing the efficiency of the administration. In six estates, however, the percentages were high, viz., Madugula (29·0), Madukkūr (34·0), Sāptūr (21·0), Bērikai (24·37), Bāgalūr (20·8) and Zamorin's estate (22·4).

Demand, collection and balance

Surplus balances

Establishment charges

Works

63. Including the devastanam and chatram sections in estates in which these sections have separate endowments, the total allotment for maramat works in all the estates was Rs. 4·42 lakhs, of which Rs. 3·83 lakhs, or 86·7 per cent, were actually spent during the year. The aggregate value of work done but not paid for within the fasli was Rs. 0·39 lakh. The total value of the works executed during the year was therefore Rs. 4·22 lakhs, or 95·5 per cent of the allotment, against 98·2 per cent in the preceding year and 81·4 per cent in fasli 1326. Of the total expenditure, Rs. 1·96 lakhs were spent on irrigation works, Rs. 1·07 lakhs on buildings, Rs. 0·26 lakh on roads and other works and Rs. 0·54 lakh on establishment and contingencies. The aggregate outlay was 15·9 per cent of the ordinary charges of the year (including those of the devastanam and chatram sections) against 15 per cent in the previous year and 16 per cent in fasli 1326.

Debts

64. The aggregate amount of debts due to the several estates in the year, excluding Kangundi which was handed over in the fasli, was Rs. 1·75 lakhs, of which Rs. 0·89 lakh was collected and Rs. 0·01

Debts due to the estates

lakh written off, leaving a balance of Rs. 0·85 lakh appertaining to thirteen estates. The outstanding debts were large in Kallikōta-Atagāda (Rs. 0·33 lakh), Rāmapatnam (Rs. 0·20 lakh), Ūrkkādu (Rs. 0·08 lakh) and Zamorin's estate (Rs. 0·08 lakh). Including the debts newly brought to account (Rs. 2·54 lakhs), and the interest and costs which accrued during the year (Rs. 0·82 lakh), the total liabilities amounted to Rs. 24·20 lakhs, of which Rs. 3·84 lakhs were repaid and Rs. 0·07 lakh struck off, leaving a balance of Rs. 20·29 lakhs at the end of the year, which was payable by fourteen estates. They were heaviest in Nawab's estate (Rs. 7·41 lakhs) and Arni (Rs. 5·29 lakhs) and exceeded one lakh in Rāmapatnam, Madukkūr, Zamorin's estate and Kadavūr. The estates to which section 45 of the Madras Court of Wards Act I of 1902 applied during the year were the Kadavūr, Arni and Nawab's estates. The proprietor of the Kadavūr estate, on whose application the Court first took it over in 1911, died in September 1918, and Government directed the Court in January 1919 to continue the superintendence of the estate on behalf of the present minor proprietor, who is the eldest son of the deceased zamindar. Of the total debts due by the estate (Rs. 1·60 lakhs), debts amounting to Rs. 0·33 lakh were paid off within the year, leaving a balance of Rs. 1·27 lakhs. It is hoped that the debts payable by the Arni estate will be paid off from the surplus income of the estate in about ten years. Nawab Saiyid Muhammad Sahib Bahadur died in February 1919. As it was found that the estate was hopelessly embarrassed and its funds were insufficient even for the ordinary expenses of its management, it has since been handed over to the Nawab's heirs.

Debts due by the estates

Encumbered estates

Miscellaneous

65. Separate accounts were maintained for the religious and charitable institutions attached to Kallikōta-Atāgada, Madukkūr, Kadavūr, Sāptūr, Sivaganga, Ūttumalai, Ūrkkādu, Talaivankōttai and the Zamorin's estate. The administration of these institutions continued to be satisfactory and their financial condition (except in Ūttumalai) was generally sound. The second-grade college maintained by the Zamorin's estate did well at the public examinations, the results of the Intermediate examination being particularly good. The institution was regaining its old popularity and its discipline and tone were satisfactory. The Raja's High school, Sivaganga, continued to work satisfactorily, but the results of the School Final examination were not so good as in the previous year. A private gentleman made the handsome donation of Rs. 25,000 for the construction of a hostel.

REVENUE AND RENT-PAYING CLASSES

(FASLI 1328—1ST JULY 1918 TO 30TH JUNE 1919)

[*Report on the Settlement of Land Revenue for fasli* 1328]

Revenue-paying classes

66. The principal revenue-paying classes of the Presidency are zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The last class predominated largely and contributed about 77·5 per cent of the land revenue. There was an increase of about 1·5 per cent in the total number of ryotwari holdings as compared with that of fasli 1327.

Rent-paying classes

67. Tenants in zamindari and whole inam villages constitute the rent-paying classes. Subletting was chiefly resorted to by those engaged in professions other than agriculture or by large landholders. It was on the increase in the Kāvali division of the Nellore district owing to the purchase of tank-bed delta wet lands by non-resident well-to-do persons, in the Madakasira taluk of the Anantapur district where most of the fertile lands are owned by Brahmans, a non-cultivating class, and in the tracts under the Tungabhadra channels in Bellary; and on the decrease in some other taluks of Nellore, in the Tirumangalam taluk of Madura, and in South Kanara.

CHAPTER III

PROTECTION

LEGISLATING AUTHORITY

68. *Vide* pages 128 to 131 of the Report on the administration of the Madras Presidency for the year 1911–12.

COURSE OF LEGISLATION (1919–20)

Legislative Council

69. The term of office of all the additional members of the Legislative Council expired on the 31st July 1919 and the Council was re-constituted by fresh elections and nominations with effect from the 5th August. After the re-constitution, four official members resigned during the year, three on account of a change in their official position and the fourth on his ceasing to be the Advocate-General of the Presidency. An elected non-official member resigned his seat as he was proceeding to England. All these vacancies, except an official one, were duly filled up in the course of the year. Including 13 adjourned meetings, there were 19 meetings of the Council, the average attendance of additional members being 36·9 (9·7 official and 27·2 non-official).

Acts and Bills

70. Besides an Act to validate a marriage celebrated by a person not duly licensed under the Indian Christian Marriage Act, seven Acts were passed during the year, viz., (1) An Act to amend the Madras Outports Landing and Shipping Fees Act, 1885, taking power to levy fees on passengers who make use of ports for purposes of embarkation or disembarkation ; (2) An Act amending the Madras Civil Courts Act, 1873, so as to do away with the petty and mechanical work of District and Sessions Judges in connexion with the supervision of the establishments of subordinate courts ; (3) An Act to amend the Madras Forest Act, 1882, empowering the Governor in Council to delegate to the Chief Conservator of Forests or any other officer or authority the powers of the Board of Revenue in regard to forest matters ; (4) An Act amending the Madras Village Courts Act, 1882, and authorizing the establishment of panchayat courts possessing civil and criminal jurisdiction and consisting of members appointed wholly by election ; (5) An Act to amend the Malabar Land Registration Act, 1895, so as to remove certain restrictions in regard to the registration of the janmi and the tenant as joint pattadars ; (6) The Madras Children Act providing for the custody, trial and punishment of youthful offenders and for the protection of children and young persons ; and (7) The Madras District Municipalities Act, 1920, consolidating and amending the law relating to district municipalities. The last-mentioned Act was the most important of the Acts passed during the year. It gives effect as far as possible to the recommendations of the Royal Commission on Decentralization in regard to district municipalities and the views of the Secretary of State and the Government of India on them, and also to the Government of India's resolution of 1918 on local self-government.

A Town-planning Bill for the purpose of regulating the development of towns so as to secure to their inhabitants sanitary conditions, amenity and convenience and a Bill to make better provision for elementary education in the Presidency were also introduced. They were both referred to a select committee and were pending before the Council at the close of the year. A Muhammadan non-official member introduced a Bill "to provide for the voluntary registration of Mussalman marriages and divorces" which was also referred to a select committee. An amendment was made in the business rules of the Council so as to require that the business of the Council shall be conducted in English, subject to the proviso that the President may, in his discretion, permit any departure.

Government of India

71. During the year no draft Bills were sent by the Local Government to the Government of India for introduction in the Legislative Council of the Governor-General.

POLICE (1919)

[*Report on the administration of the Police of the Madras Presidency for the year* 1919 ; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Police*]

Administrative changes

72. The experimental scheme of working without Circle Inspectors in the three districts of Trichinopoly, Kurnool and Coimbatore proved an entire failure and was abandoned, the status quo ante being restored in those districts. Transfers of district officers were more numerous than in the previous year and this was very largely due to the shortage of officers, and the uncertainty of the probable time of rejoining by officers on military service and on leave. For want of officers thirteen subdivisions were again left without a separate officer in charge for varying periods. At the close of the year the Superintendents of nineteen districts had the services of Personal Assistants. Out of nineteen officers on military duty at the beginning of the year fourteen were released from that duty during the year. The services of a Deputy Superintendent were placed at the disposal of the Government of India for employment as Assistant Commissioner in Port Blair. During the year an Indian officer of the Imperial Service and two officers of the Provincial Service retired. A Deputy Superintendent was permanently promoted to the rank of District Superintendent of Police. A Deputy Superintendent was sanctioned for employment in the office of the Inspector-General of Police and the post of manager was abolished. With effect from the beginning of the year a time-scale of pay was sanctioned by the Secretary of State for the Imperial Police Service. This was subsequently modified by the conversion of the scale of pay into substantive pay plus overseas allowance to officers of non-Indian domicile. A revised rate of pay on time-scale was also sanctioned for Provincial Police officers.

The Police force

Strength

73. The sanctioned strength of the permanent force on the last day of the year was 32,889 or 104 more than that of the previous year. The number of vacancies in the force at the end of the year was 1,004, or 547 less than in the previous year. The cessation of the war and the grant of a war allowance facilitated recruitment to some extent but only for a short time. The direct recruitment of head constables continued but the scheme proved very disappointing and was found to have had a bad effect on recruitment. Further enlistment of this kind was therefore stopped. The Naik scheme introduced in the Coimbatore district at the beginning of the year has proved a success. Its extension to other districts presents a much more favourable prospect of improving the calibre of the subordinate police.

Health

The health of the force improved slightly. Mortality showed a decrease (536 against 823), the percentage to the actual strength being 1·7 against 2·7 in the previous year. The

percentage of admissions to hospital fell from 168·7 to 162·7 and that of the daily sick rate from 3·4 to 3·0. The percentage of departmental punishments rose slightly (32·4 against 29·2). There was a slight fall in the percentage of punishments for absence without leave, while punishments for offences other than absence without leave showed an appreciable increase. Dismissals were more numerous than in the previous year (314 against 225), while the number of suspensions remained almost the same (444 against 442). The largest number of dismissals was in Madras City (28). The proportion of blackmarks awarded increased to 22·2 per cent from 20·2 per cent. The system of awarding deferred blackmarks was used freely. The number of police officers and men punished judicially rose from 169 to 207 of whom 122 were convicted of offences committed by them in their official capacity and the rest of offences committed in their private capacity, the corresponding figures for the previous year being 93 and 76 respectively. There was an increase both in the number of persons convicted under the Police Act and for negligently allowing prisoners to escape. Convictions for extortion were four more than in the previous year. Three officers and one constable were awarded the King's Police Medal. An officer of the Imperial Police was made a Member of the British Empire and three officers of the Provincial Service and an Inspector received Indian titles. For good recruiting work three Deputy Superintendents, six Inspectors, eleven Sub-Inspectors and a head constable were granted recruiting badges by Government and three Inspectors and three Sub-Inspectors received certificates. A further gratifying increase occurred in the number of police officers and private individuals who received money rewards, almost all districts contributing to it. The practice of granting liberal rewards for good work especially to village officers and private individuals and the presentation of the rewards in public at the annual district sports or other special ceremonial functions which has become a normal feature in most districts, has resulted in more spontaneous co-operation by the public. Out of 3,441 head constables and 26,363 constables who were in the force on the last day of the year, 23 head constables or 0·7 per cent and 2,620 constables or 9·9 per cent were classed as illiterate. The Provincial Training School, Vellore, did another year's efficient work. The probationary Deputy Superintendent who was in the school at the beginning of the year remained there until after the close of the year. A probationary Assistant Superintendent of Police joined the school in April. A change was introduced during the year in the system of admissions to the school, these being made twice, in June and in October. The object of the change is to accelerate the supply of trained Sub-Inspectors, the number of vacancies in districts having increased to a very great extent. The staff of the school was accordingly increased by two lecturers, one permanent and one temporary, and one drill instructor. The general standard of the cadets admitted for training was not as high as is desirable but the training and discipline in the school form their character and equip them with grit and smartness. The formation of a separate Shorthand Bureau of 24 Sub-Inspectors was sanctioned during the year but the Bureau could not be opened until after the close of the year. These Sub-Inspectors will hereafter be exclusively employed on shorthand work in different parts of the Presidency, as required by district officers and the Deputy Inspector-General of Police, Railways and Criminal Investigation Department, and when not on reporting work will be stationed in their depot at the school where they will receive practical instruction under the Shorthand Instructor. The Bureau appears to be popular among Sub-Inspectors and its formation appears to have really solved a most difficult problem—that of securing efficient reporters in constant practice. As usual, "First-aid to the injured," riding and *Jiu Jitsu* were taught in the school.

Conduct

Education

74. The improvement in co-operation on the part of village magistrates was steadily maintained during the year. That such co-operation was promptly appreciated is evidenced by the fact that 955 village officers were

Village police

granted rewards amounting to Rs. 8,843, the corresponding figures for the previous year being 941 and Rs. 7,758, respectively. Superior officers were doing their best to inculcate in the rural staff a proper sense of their duties and responsibilities and their endeavours have borne fruit here and there. Side by side with this record of good work towards detection of crime, it has to be noted that in regard to prevention the village police have been of little or no assistance. The work of ghat talaiyaris however was satisfactory in most districts. Their presence on roads has reduced grave crime in certain localities and rendered them safe for the travelling public, and many of them have received rewards for the prevention of crime and the arrest of offenders. In several districts the talaiyaris did not live at their ghats and orders were issued during the year making residence at ghats compulsory on pain of dismissal.

Armed reserves

75. The reserves were generally maintained up to strength and in a state of efficiency. Drill and discipline were good. The emergency forces were kept up to their full numbers as far as possible. All armed reserves except that at Bellary were mobilized in accordance with orders. In some districts they were also specially mobilized, e.g., on the occasion of the Dasara-Muharram festivals, apprehended outbreaks of looting and His Excellency the Viceroy's tour. Parties of reserves from other districts were, as in the previous year, deputed to Cuddapah and Kurnool during the Hindu-Muhammadan festivals, and the Sivaratri festival in the latter district and to Madras during the Viceroy's visit.

Railway police

76. The chief form of crime on the railway is theft which increased in the year. Six cases of murder were reported but in most of these the offence had been committed outside railway limits. Thefts from passenger trains showed a large increase which was due partly to restrictions in train service and consequent overcrowding. Systematic armed patrols over several parts of the South Indian Railway led to the detection of a number of these cases while the arrest and conviction of some habitual train thieves operating on the Madras and Southern Mahratta Railway and the detailing of policemen in plain clothes in trains to watch the higher class compartments checked such thefts on this line. The joint checking of railway fittings by the railway servants and the Railway Police minimized thefts of railway materials in the South Indian Railway. In the other railway the binding over of receivers and the institution of special police patrols kept down thefts of tie-bars which were once rife. Insufficient lighting and watching arrangements at most stations on this railway were the cause of thefts from goods sheds and yards. The amount of property lost was larger but there was a satisfactory increase in the percentage recovered. Detection showed an appreciable improvement. Complaints of shortages rose but inquiries showed that many cases were reported on insufficient grounds. The independent seal-checking of wagons by the Railway Police, Madras, continued to be of value in localizing thefts from goods trains. Attempts to derail trains numbered three and cases of stone-throwing 30. Five of the latter ended in conviction. The Railway Police and the district police continued to work in harmony and the relations with the railway staff were generally cordial.

Statistics of crime

77. The effect of the bad season in 1918 made itself felt in the year under report and aggravated the severity of economic conditions. Crime increased correspondingly and its total volume was so great that for a parallel we must go so far back as the famine years of 1877–78. The number of true cases of cognizable crime under the Indian Penal Code excluding nuisances was 67,873 or 8,069 more than the figure for the previous year. Burglaries and thefts were the main heads of the increase. Ganjām, which was affected by famine, was the scene of a number of grain lootings. In the districts bordering on Hyderabad a large influx of criminals from across the frontier tended to an increase in crime. There were 26,585 serious offences against person and property as against 23,738 in the previous year, the ratio being one case to every 1,557 persons as against one case to 1,744 persons. Madras City, Gōdāvari, Kistna, Guntūr,

Nellore, Kurnool, Anantapur, Cuddapah, Madura and the Nilgiris were again the most criminal districts. There was an improvement in Rāmnād. There were 7,798 more cases of grave crime in the year than in 1918. The increase occurred under every head and in the same districts as those showing an increase in the total cognizable crime. The bulk of the increase was under house-breakings, thefts and cattle-thefts and this was especially the case in Ganjām, Vizagapatam, Gōdāvari, Kistna, Trichinopoly, South Malabar, North Arcot, Chittoor and Salem, in the last three of which the increase in cattle-thefts was marked. Murders numbered 982 and raised the previous year's record by 89, Coimbatore as usual again topping the list with the largest number of cases (138) and the largest increase (+ 45). Considerable unrest prevailed as a result of the economic situation and the police had to face a large amount of extra work of a trying nature in averting trouble. Commendable work was done by the police and the revenue authorities and private gentlemen in regulating the sale of rice to the poorer classes. There was no serious disturbance of the public tranquillity and the few stray minor cases of looting which occurred were promptly put down. The Dasara and Muharram festivals again synchronized and the same precautions were taken as in the previous year. The Indian Defence Force was mobilized and parties of reserve police were detailed to centres where trouble was apprehended. The two festivals passed off smoothly. The Government have recently appointed a committee to suggest measures for the removal of the causes of friction between the two communities during the celebration of their respective festivals in the Presidency, and it is hoped that a mutual rapprochement will be arrived at. There was an abnormal increase in the number of cattle-thefts, 5,583 against 3,891. Primarily the increase was due to the extraordinarily high price of hides. The number of true cases of coining dealt with in the year increased from 25 to 39 and 23 of these ended in conviction. An important organization of note forgers which had been working for three years in Gōdāvari was unearthed in the course of the year. They obtained a printing press from Madras ostensibly for printing work and with the aid of a skilled engraver and printer from Madras began to manufacture currency notes of the denomination of Rs. 100. The first 2,000 notes had to be destroyed owing to an error in date. Subsequently another thousand were made and were put into circulation. Two of the accused were convicted of uttering the notes. The blocks could not be recovered.

Detection and prevention of crime

78. The ratio of true cases of cognizable crime under the Indian Penal Code (omitting nuisances and cases in which investigation was refused) which ended in conviction to those disposed of in the year was 35 per cent as against 31·1 per cent in the preceding year. Most districts contributed to this improvement and, considering the exceptionally heavy and trying work to which the whole force was subjected by the unusual conditions prevailing, the progress that has been achieved was satisfactory. The power to refuse investigation under section 157 (*b*), Criminal Procedure Code, was again freely exercised, the percentage of cases so dealt with being 9·8 as against 9·2 in 1918. The number of references to the police by magistrates under section 202, Criminal Procedure Code, was almost the same as in the previous year, 1,592 as against 1,600. The number of bad characters newly registered rose from 6,358 to 8,028. The increase in the number of suspects was considerable and the number of known depredators and receivers exceeded the figures for the previous year by 540 and 34 respectively. There was a proportionate increase (3,212 against 2,812) in the number of persons removed from the register on the ground that they were no longer addicted to crime. The total number of bad characters at large on the last day of the year was 25,174 against 23,871, and of these 2,132 or 8·5 per cent were out of view as against 7·7 per cent in the previous year. Temporary outposts were opened in a number of places to watch bad characters and criminals registered under the Criminal Tribes Act. A system of interchange of constables between Rāmnād and Pudukkōttai State introduced in the year

Preventive work and criminal gangs

led to a number of arrests of criminals belonging to the State. A system of traffic control was introduced in some of the important towns and traffic conditions improved. The Deputy Inspector-General of Police, Railways and Criminal Investigation Department continued to exercise general supervision over criminal settlements. Since the close of the year the control over settlements and the general working of the Act have been transferred to the Labour Commissioner. The Commissioner attended the All-India Conference held at Delhi in December 1919 to discuss the working of the Criminal Tribes Act in India. Eight tribes were proclaimed under section 3 of the Criminal Tribes Act and both parts of section 10 were extended to them. In addition section 10 (*a*) was applied to four tribes. "The East India Distilleries and Sugar Factories, Limited," Kulasekharapatnam, Tinnevelly district, was declared a settlement under the Act for the Uppu Koravas and other Koravas of the Tinnevelly district. As the Salvation Army desired to withdraw from the management of the Aziznagar settlement for Veppur Paraiyas in South Arcot, it was taken over by Government and an Inspector assisted by an officer of the Agricultural Department was placed in charge of it early in the year. The voluntary settlement for Kallas at Gudalur in the Madura district was temporarily abandoned on account of the unhealthiness of the locality. The other settlements continued to work more or less on the same lines as in previous years. The number of persons registered under the Criminal Tribes Act during the year was 3,536. The number of persons convicted under the Act was 3,076, of whom 26 were under section 23 and 87 under section 24. The number of children on the rolls of the schools in the various settlements on the last day of the year was 1,172 (666 boys and 506 girls). Supervision over registered members was fairly effective.

Criminal Investigation Department

79. An additional gazetted Assistant to the Deputy Inspector-General was sanctioned with effect from 1st December in place of the manager. The orders prohibiting the entry into British India of certain persons were cancelled by Government. There was no political crime of violence during the year. Labour troubles became prominent and there were several strikes. The officers of the department were employed on various confidential enquiries, the investigation of a case of forgery of 100-rupee currency notes, a sensational theft from a railway cash chest, a destructive fire in the railway workshops at Negapatam, cases of cotton fraud in Bombay and frauds in post offices and on enquiries relating to the circulation of counterfeit coins and traffic in firearms in the Banganapalle State.

Finger-print Bureau

The number of references made to the Finger-print Bureau regarding the previous history of suspected persons was 17,984 or 3,275 more than in the previous year; 4,129 were identified, the percentage being 23·0 against 21·6. The largest number of references again came from Madras City, Guntūr, Kistna, Nellore and Tanjore from within the Presidency and Mysore and Federated Malay States outside. During the year 21,986 finger-impression slips were received for record inclusive of 69 slips relating to the Excise Department as against 15,200 slips in the previous year, of which 52 came from the Excise Department. Eliminations numbered 5,778 and the number of slips on record at the end of the year was 204,035. The staff of the Bureau gave expert evidence on 476 occasions in civil and criminal courts.

Finance

80. Excluding the cost of criminal settlements (Rs. 2,12,589), the cost of the department for the official year 1919–20, worked out according to the information available up to date, was Rs. 1,19,72,324, or an increase of Rs. 17,07,787 over the provisional figure for the previous year.

CRIMINAL JUSTICE (1919)

[*Statistics of Criminal Courts in the Madras Presidency for the year 1919; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Criminal Justice*]

General

81. The number of courts which exercised criminal jurisdiction during the year underwent variation. Additional Sessions Courts were increased by three to nine and the Courts of Assistant and Deputy Magistrates without divisional charges by seven to 26. The number of Additional District Magistrates' Courts was reduced by one, that of Tahsildar-Magistrates' Courts by 24 while that of other Subordinate Magistrates' Courts was increased by 23. Twelve new Benches of Magistrates, which increased the strength of these tribunals by 81, three new Special Magistrates' Courts and two Additional Honorary Magistrates' Courts were also established during the year. Two more Subordinate Judges exercised the powers of Assistant Sessions Judge, thus increasing the number of such judges to six. The other classes of criminal courts which exercised jurisdiction, except village magistrates' courts, remained the same as in the previous year. Ninety-three Honorary Magistrates, or six more than in the previous year, had seats on the four benches established for the City of Madras which continued to render useful work, although there was again a fall, by over 1,000 cases, in their total outturn. The number of village magistrates who exercised criminal jurisdiction increased by 44 to 3,852, but this is still below the average for the preceding five years (4,186). The total number of original cases instituted in all the criminal courts during the year was about 333,000 or about 53,000 more than in the previous year and the total number of appeals preferred rose from about 8,800 to about 9,300.

Original cases

Village courts

Regular Magistrates' courts

82. In village magistrates' courts there was a fall both in the total number of cases instituted and in the number of persons tried, but the percentage of conviction rose from 16·71 to 17·96. The number of cases instituted in regular magistrates' courts in the mufassal was 294,656, or about 58,000 more than in the previous year, of which 5,763 or 884 more than in 1918 were pending at the end of the year. The average duration from the beginning to the end of trial of cases disposed of by these courts was 8·6 days against 8·1 in the previous year. Before Bench Courts the average duration was two days, before Special Magistrates three, before Sub-Magistrates 12, before Assistant Magistrates four, before Joint Magistrates 25, and before Deputy Magistrates 28. It is generally recognized that a frequent cause of delay is the failure of the magistrates to exercise proper discretion in granting adjournments or to control the examination of witnesses appearing before them. That these causes can be largely mitigated by due attention on the part of the superior magistracy is evidenced by the success attained by the District Magistrate, Kistna, in gradually reducing the average duration of cases in all the courts of the district from 11·12 days in 1916 to 5·4 days in the year under review. There was a slight rise in the total number of cases instituted in Presidency Magistrates' Courts. The number of cases committed to Sessions Courts in the mufassal was 1,943 against 1,459 in 1918. The total number of cases pending in all the courts at the end of the year was 202 against 96 at the end of 1918, to which North Arcot and Rāmnād contributed the largest number, viz., 22 each. The average duration of cases before Sessions Courts fell from 54 to 51 days. The number of cases committed to the High Court Sessions was 54 against 46 in the previous year. Six cases were pending at the end of the year.

The Presidency Magistrates' courts

Sessions courts

The High Court

Appeals

Magistrates' courts

83. Of the persons sentenced by second and third-class magistrates 13,083, or 756 more than in the previous year, appealed to first-class magistrates. The appeals of 725 persons were pending at the end of the year against 621 at the end of 1918. The average duration of an appeal in the courts of subdivisional magistrates was 17 days against 19 in the

Sessions courts

previous year and there was a slight fall in the percentage of successful appellants. The number of persons who appealed to Sessions Courts against the decisions of first-class magistrates rose by 375 to 2,688. The number of persons whose appeals were pending at the end of the year was 207 against 161 at the end of 1918. The average duration of an appeal rose from 29 days to 31 days. The percentage of successful

The High Court

appellants rose from 20·22 to 22·28. The number of appellants to the High Court rose further by 309 to 1,527. The Government appealed against the acquittal of 15 persons, the average for the preceding five years being 48. The decrease was due to the operation of the administrative orders issued during the year at the instance of the Government of India to regulate the procedure to be adopted in connexion with such appeals. The appeals of 569 persons were rejected *in limine*, 99 convictions were reversed and six orders of acquittal were set aside on appeal by Government, and four accused were convicted. In the case of 378 persons the finding and sentence were maintained after notice and in 137 cases the sentences were reduced or otherwise altered. New trial or further inquiry was ordered in the case of four persons. The appeals of 328 persons were pending at the end of the year against 243 in 1918. The average duration of an appeal was 48 days against 54 in 1918.

Reference and revision

84. The number of applications for revision presented in District Magistrates' Courts was 779 against 598 in 1918. The number of cases which these magistrates took up *suo motu* or on reports from their subdivisional magistrates further fell from 18 to 11. In Sessions Courts 561 applications for revision were presented, or 135 more than in the previous year ; and the number of cases taken up by them *suo motu* was 41 against 63 in 1918. The number of revision petitions received in the High Court was 890, an increase of 129 over the figure for 1918. Eighty cases were reported by District Magistrates and Sessions Judges and 48 were taken up by the High Court *suo motu*. Death sentences on 129 persons were referred to the High Court for confirmation under section 374 of the Criminal Procedure Code. The sentences on 60 persons were confirmed, those on 31 were commuted to transportation for life, those on 11 to rigorous imprisonment, and the sentences on 27 persons were reversed and acquittal ordered. Of the cases referred by Sessions Judges under section 307, Criminal Procedure Code, on the ground that the verdicts were wrong, the verdicts on 37 persons were upheld, the verdict on one was modified and those on the remainder (23 of "guilty" and 26 of "not guilty") were reversed.

The jury system

85. The number of persons tried by jury rose by 1,336 to 2,763 and in the case of 2,669 persons the Judges accepted their verdict. The number of persons tried with the aid of assessors was 2,196 as against 1,831 in the previous year. In the case of 1,414 persons the Judge agreed with all the assessors, in the case of 291 he differed from one or more of them, and in the case of 491 he differed from all the assessors. With few exceptions, the Sessions Judges expressed satisfaction with the working of the jury system during the year.

Miscellaneous

86. The number of witnesses detained for more than three days was again large in most classes of courts. The number of cases reported under the Indian Penal Code during the year rose, by 9,726, to 121,779. The increase was noticeable under the heads of theft, criminal force and assault, hurt, criminal trespass and mischief. The increase in the number of offences against property was due to the economic distress consequent on a bad agricultural season and inflated prices. There was a slight rise, from 39·02 to 40·08, in the percentage of convictions in cases tried under the Indian Penal Code : also in that (14·45 to 15·11) of cases rejected under section 203, Criminal Procedure Code. There was also a rise, by about 400 to 2,052, in the number of persons required to pay compensation under section 250, Criminal Procedure Code. The total number of

Punishments

sentences passed during the year rose by about 25,500 to 234,190. There was an increase also in the amount of fines imposed and in that of

compensation paid to complainants under section 545, Criminal Procedure Code. There was again an increase in the total number of young persons admitted to the prisons of the Presidency.

PRISONS (1919)

[*Report on the administration of the Jails of the Madras Presidency*, 1919 ; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

Accommodation

87. There was no change in the number of central and district jails, viz., nine and five respectively. The Civil Jail, Madras, was open throughout the year. At Kunnamangalam in the Malabar district, a new sub-jail was opened, and the sub-jail at Vayalpad in the Chittoor district, which was reported as closed during the previous year, remained open. The number of sub-jails in consequence was 320 at the end of the year as against 318 at the beginning. There was temporary overcrowding in individual jails, which was relieved by timely transfers to other jails, or by accommodating excess prisoners in tents and temporary sheds. The releases effected on the occasion of the Signature of Peace helped to reduce the overcrowding to some extent.

Prisoners of all classes

88. The year opened with a population of 15,249 prisoners of all classes ; 140,262 were received and 139,160 were discharged, leaving 16,351 in confinement at the close of the year. The daily average number confined rose from 13,375·76 to 16,098·04. The number of under-trial prisoners dealt with, including those in confinement (4,057) at the beginning of the year, was 74,102. The daily average was 4,368·24 or 1,291·38 more than in the previous year. Of this number, 43 per cent were convicted and 56·62 per cent acquitted and released. There were 60 escapes and 90 deaths. The average period of detention of prisoners awaiting trial before Sessions Courts and Magistrates, rose from 31·52 to 44·11 and 12·80 to 17·60 days, respectively, a point to which the particular attention of District Magistrates was drawn with the request that effective supervision may be exercised over the subordinate magistracy so as to prevent the unnecessary protraction of judicial proceedings. The year opened with 391 civil prisoners in custody : 3,071 were admitted and 3,055 were released, eight prisoners died and 14 were transferred, leaving 385 in confinement at the end of the year. The daily average fell from 390·11 to 300·65. Four State prisoners remained at the close of the year as against five at the beginning.

Under-trial prisoners

Civil prisoners

State prisoners

Convicts

89. The convict population on the 1st January 1919 stood at 10,567 males and 234 females, or 1,376 more than in the previous year : 30,410 males and 1,550 females were admitted by direct commitial as compared with 23,180 and 1,016 respectively in the previous year. The total number of convicts received by transfer was also larger than in the previous year by 6,395. Of those discharged during the year, 2,534 were released on appeal, 23,468 on expiry of sentence, 2,651 under the remission rules and 2,351 by order of Government (including 1,515 set at liberty on the 19th July in commemoration of the signing of Peace). One hundred and seventeen were deported to the Andamans, 23 were transferred to Lunatic Asylums, 14 escaped, 58 were executed and 452 died. The daily average number of convicts was 11,429·15 or 1,520·36 more than in the previous year. The number remaining at the end of the year was 12,262 against 10,801 or 1,461 more than in the previous year. Of the 31,959 convicts admitted during the year, 2·70 per cent were Christians, 8·34 per cent Muhammadans and 88·96 per cent Hindus. The number of convicts admitted under the age of 16 years was 116 as compared with 107 in 1918. The number of youthful offenders under the age of 15 was 52 boys and 4 girls against 36 and 4 respectively in 1918. Of the 52 juveniles, 41 were transferred to the Reformatory School, Chingleput, and one to a

Juveniles

Salvation Army Home; one was released by order of Government, and the remaining five boys and four girls completed their sentences in jails. The designation "Tanjore District Jail" for adolescents was altered during the year to "Tanjore Borstal Institution." There were 212 adolescents in this institution at the beginning of the year, of whom 191 were between 16 and 21 years, and 21 were aged 21 years and over. The age limit for admission was raised to 23 years as a tentative measure. The usual Borstal course of developing the mind and body was adopted as in previous years. Regular lectures were given on moral, religious and other subjects by honorary lecturers specially appointed for the purpose and everything possible was done to educate the boys on sound lines and to develop their character. Four boys were conditionally released by Government to work under the care of selected honorary probation officers. Of these, one failed to comply with the conditions upon which he was released, though he did not revert to crime, and was recommitted to jail to undergo the unexpired portion of his sentence. Another boy working in the Rajah Mirasdar Hospital at Tanjore fell ill and was released unconditionally. The remaining two boys were leading an honest life. Of the five boys similarly released during the previous year, four were doing well and one was reported to have reverted to crime.

Conduct

90. There were twenty-four escapes during the year, of which ten were from central and district jails and fourteen from sub-jails. Ten of these were recaptured. The number of jail offences dealt with by Superintendents fell, by 656, to 7,606, and nine offences were dealt with by criminal courts. The total number of punishments in consequence declined from 8,364 to 7,732 as also the ratio to average strength which fell from 84·41 to 67·65. Corporal punishments were inflicted in only four cases as against nine in the previous year. Habituals formed 22·34 per cent of the convict population and were the recipients of 3,088 or 39·94 per cent of the total number of punishments and three out of four whippings. On the whole, the convicts were well behaved and amenable to discipline, the percentage of punishments, viz., 67·65, being the lowest on record for many years. There was no disturbance or plot against authority in any of the jails.

Habituals

Remission

The number of convicts released under the remission rules fell from 2,880 to 2,671. Special remission for continuous good conduct was awarded to 1,762 convicts. Extra remission for work turned out over and above the prescribed task was earned by 139 convicts, and gratuity in lieu of remission by 25. Convicts, as a rule, prefer remission to gratuity for increased outturn of work.

Education

Elementary education in all central and district jails was imparted by the paid teaching staff, and lectures on religious and moral subjects were delivered by honorary lecturers. Elementary health lectures on sanitation and the prevention of disease were imparted as a matter of routine in all jails by the medical staff.

Vital statistics

91. The year was an unfortunate one as regards sickness and mortality, due to the prevalence of influenza, cholera and dysentery, coupled with unfavourable economic conditions. The admissions to hospital increased by 2,571 to 9,567 as also the daily average sick from 239·30 to 343·60. There were 550 deaths during the year as compared with 360 in 1918, influenza and cholera being responsible for no less than 164 and 48 deaths respectively. Dysentery caused 84 deaths. In central jails the death-rate per mille was 40·67, in district jails 16·74 and in subsidiary jails 26·95 as compared with 27·61, 15·97 and 30·27 respectively in the previous year. These figures go to show that the larger penal institutions are responsible for the increase in mortality.

Sanitation

The bacteriological and chemical analysis of jail water-supplies, which was suspended for some years, was resumed during 1919. At Rajahmundry, Vellore, Trichinopoly, Coimbatore, Madura and Palamcottah, improvements to wells were carried out. At Vizagapatam, the mains from the municipal water-supply were enlarged. At Cuddalore, repairs to service pipes were carried out and a second bullock pump was provided for lifting water from the lake well. A scheme for linking up the District Jail, Berhampur, with the municipal pipe water-supply was placed before Government for sanction. At

Cannanore, the oil-engine was repaired and brought into use. As a precautionary measure, all drinking water was either boiled or chlorinated. Improvements were also carried out to the kitchens at Bellary, Vizagapatam, Palamcottah, Madura and the Penitentiary. Fly proof latrines were constructed at Trichinopoly and the existing latrines at Vizagapatam and the general and hospital latrines at Madura were rendered fly proof. Improvements to the latrines at Vellore and Tanjore were also carried out. A portable latrine was constructed at Berhampur. Septic tanks were erected at Rajahmundry, Salem and Madura to deal with sewage. Incinerators were constructed for the disposal of night-soil at Cannanore, Bellary, Vizagapatam and Madura. A tubercular shed and a female hospital were built at Rajahmundry. Several other minor improvements were carried out to improve lighting and ventilation in cells, wards and other buildings.

Finance

92. Excluding the outlay by the Public Works Department on buildings, the total expenditure for the year amounted to Rs. 25 lakhs, which is an increase of Rs. 4·93 lakhs over that of the preceding year, and is due to increased charges under all heads except travelling allowance of non-gazetted officers, contingencies and manufactures. The large increase in the prison population and the abnormal rise in the price of foodstuffs and other articles were mainly responsible for the great increase in expenditure during the year. The net cost of maintaining prisoners and the average net cost per head advanced from Rs. 9·08 lakhs and Rs. 67-14-0 to Rs. 15·72 lakhs and Rs. 99-8-0, respectively. There was a slight fall in the cash earnings of the year which amounted to Rs. 2·06 lakhs. The total expenditure on jail and sub-jail buildings amounted to Rs. 1·69 lakhs against Rs. 1·35 lakhs in 1918.

CIVIL JUSTICE (1919)

[*Statistics of the Civil Courts in the Madras Presidency for the year* 1919; *Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Civil Justice*]

General

93. The permanent retention of eleven temporary Subordinate Judges' courts and 14 temporary District Munsifs' courts was sanctioned during the year, thus increasing the total number of such courts to 41 and 170, respectively. The permanent retention of the two Special Small Causes courts which had been working since 1916 was also sanctioned during the year. There was no change in the number of permanent courts of other classes. There were also 16 temporary Subordinate Judges' courts and 18 temporary District Munsifs' courts. In October, the Secretary of State signified his assent to the raising of the permanent strength of the High Court to twelve judges. In addition to the regular courts, 5,029 Village courts, or about 50 more than in the previous year, exercised civil jurisdiction.

Litigation
Number, nature and value of suits

94. The total number of suits instituted in the Presidency during the year was 511,029 or 22,163 more than in 1918. For the Presidency as a whole, one suit was instituted for every 81 persons of the population against one for every 85 persons in 1918, and the ratio for the Presidency town was one for every 33 persons against 35 in the previous year. The figures of institutions were still below those of 1916 and 1917. The number of suits instituted for money or movable property formed 87·7 per cent of the total as against 88·8 per cent in 1918. The number of suits for immovable property, other than mortgage suits, rose, by 4,229, to 26,014, while those for specific relief rose, by 419, to 5,383. The total value of suits instituted in courts other than Village and Revenue courts and unpaid tribunals was Rs. 1,070·54 lakhs or Rs. 26·81 lakhs more than in the previous year. The average value of a suit was Rs. 271 against Rs. 289 in the previous year. Apart from Revenue courts, 30·51 per cent of

the suits instituted were of the value of Rs. 20 and less against 34·32 per cent in the previous year, and 63·47 per cent of the suits were between the values of Rs. 20 and Rs. 500. The number of suits above Rs. 500 in value was 28,729 or 4,223 more than in 1918. The number of suits triable by Village courts which were filed before the higher tribunals was 48,345, an increase of 237 over the figure of the previous year. The percentage of suits in which plaintiffs succeeded in obtaining decrees for the whole or part of the relief claimed by them fell from 78·21 to 76·77. In 71·42 per cent of contested cases they were found to possess a well-grounded cause of action. The total number of appeals preferred was 16,720 or 1,207 more than in the previous year.

Courts of original jurisdiction

Village courts

Revenue courts

95. The total number of suits instituted in Village courts again fell, by 11,317, to 96,124. The number of suits disposed of by village munsifs sitting alone fell further by 18,385 to 74,707, but there was again a rise by 5,768 to 21,365 in the number disposed of by Benches. The total number of suits filed in Revenue courts, other than in Agency tracts, was practically the same as in the previous year. The average duration of contested suits rose from 192 days to 264 days but that for uncontested suits fell from 106 days to 88 days. The percentage of appeals preferred against the decisions of Revenue courts to the appealable decrees passed by them rose from 12·41 to 20·53. The percentage of appeals in which original decrees were confirmed was 40·14 against 45·83 in 1918.

Agency courts

There was a slight rise in institutions in Agency courts but the pendency was reduced from 607 to 452. The average duration of contested suits rose from 161 days to 172 days while that of uncontested suits fell from 111 days to 83 days.

District Munsifs' courts

In District Munsifs' courts, other than those for the Agency tracts, 123,164 ordinary suits were instituted or 15,871 more than in the previous year. The number of small cause suits instituted also rose by 13,400 to 214,133. The average total disposal of each court was 2,070 against 1,975 in 1918 and the arrears under both classes of suits rose from 76,909 to 84,814. This increase is solely attributable to the rise in institutions. The average duration of contested ordinary suits was 315 days as in the previous year; while that of uncontested ordinary suits rose from 60 days to 63 days.

Subordinate Judges' courts

In Subordinate Judges' courts, other than those for the Agency tracts, 2,754 ordinary suits, or 590 more than in the previous year, and 22,864 small cause suits or 2,306 more than in 1918 were instituted. The average disposal of ordinary suits in all the Subordinate Judges' courts was very little higher than in 1918 (59 against 58·77). The average duration of contested ordinary suits fell from 509 days to 490 days, while that of uncontested suits rose from 67 days to 96 days.

District courts

In District courts, other than those for the Agency tracts, 572 ordinary suits were instituted against 486 in 1918. The number of ordinary suits disposed of was 270 against 336 in 1918, and the arrears rose from 447 to 523. In the Special Small Cause courts, 14,057 small cause suits were filed during the year against 13,817 in the previous year and 1,848 were left pending as against 1,925 at the end of 1918. The average duration of contested suits fell from 118 days to 100 days, while there was no change in that of uncontested suits.

Court of Small Causes

In the Presidency Court of Small Causes there was a rise both in institutions and disposals and the arrears fell from 1,924 to 1,498. The average duration of contested suits rose from 52 days to 70 days and that for uncontested suits from 32 days to 37 days.

Madras City Civil Court

In the Madras City Civil Court 448 suits were instituted against 510 in 1918. The Judge disposed of 417 suits, of which 267 were contested. The arrears rose from 318 suits to 356 suits and the average duration from 310 days to 311 days for contested suits, and from 46 days to 57 days for uncontested suits.

The High Court

In the High Court the number of suits instituted or received by transfer was 915 against 699 in 1918 and the number of suits disposed of was 680 against 455. The arrears increased from 587 to 838. The average duration of contested suits was 350 days and of uncontested suits 140 days against 474 days and 173 days, respectively, in 1918.

Appellate courts

96. The number of regular appeals filed in the Agency tracts fell from 107 to 95. The number of appeals disposed of was 106 and 19 were left pending at the end of the year. The average duration fell from 78 days to 65 days. In District and Subordinate Judges' courts the number of appeals filed was 13,598 or 1,369 more than in 1918 and the arrears in the latter rose from 2,922 to 3,112 and in the former from 6,022 to 8,006. In Subordinate Judges' courts the average duration of appeals disposed of was 232 days in the case of uncontested appeals and 337 days in the case of contested appeals, the corresponding figures for the previous year being 437 days and 322 days respectively. In District courts the average duration of appeals disposed of was 187 days for uncontested and 306 days for contested appeals, the figures for the previous year being 161 days and 257 days respectively. The number of appeals from original decrees of the mufassal courts filed in the High Court was 392 against 441 in 1918. The number disposed of was 419 against 465 in the previous year and the arrears fell from 606 to 582. The average duration of appeals disposed of during the year was 424 days against 418 days in 1918. The number of Letters Patent appeals (other than Original Side appeals) filed was 86 against 110 in 1918. The number disposed of was 120 against 128 in the previous year and the arrears fell from 61 to 28. The number of appeals received against appellate decrees was 1,930 against 2,173 in 1918. The number disposed of was 2,284 against 2,400 in the previous year and the arrears fell from 2,121 to 1,775. The percentage of appeals dismissed was, first appeals from District courts 65·00, from the City Civil Court 82·35, and from Subordinate Judges' courts 55·43, Original Side appeals 74·47, appeals against appellate decisions 69·9 and Letters Patent appeals 82·07. The number of revision petitions filed in the High Court was 1,139, of which 534 were for the revision of decisions in small cause suits against 1,381 and 572, respectively, in 1918. The number of petitions disposed of was 937 against 1,156 in 1918, and the arrears rose from 1,231 to 1,435, of which 814 were pending for more than six months. The number of cases referred by the lower courts to the High Court was 11, the average for the preceding five years being 12. Four cases were left pending at the end of 1918, and of the total of 15 cases for disposal 8 were disposed of.

District and Subordinate Judges' courts

The High Court

Reference and revision

Insolvency

97. The number of insolvency petitions presented to mufassal courts showed a slight increase but the number pending at the end of the year was almost the same as in the previous year (1,112 against 1,007). The number of petitions granted rose from 1,638 to 1,707 and the total amount of creditors' claims admitted increased from Rs. 12·74 lakhs to Rs. 15·06 lakhs. The total amount of assets distributed fell however from Rs. 4·83 lakhs to Rs. 3·60 lakhs. The number of insolvents discharged was five. The number of insolvency petitions presented in the High Court during the year was 215 against 230 in 1918. The number of petitions disposed of was 264 against 244 and the arrears decreased from 981 to 938. The total amount of claims admitted during the year was Rs. 5·20 lakhs and the amount paid as dividends to creditors was Rs. 1·92 lakhs.

Mufassal courts.

The High Court

Miscellaneous

98. The total number of applications for execution received in all the courts in the mufassal taken together, except Village courts, rose by about 14,000 to 354,607. Satisfaction was obtained in full in 16·98 per cent of the applications disposed of against 16·31 per cent in the previous year. Satisfaction was obtained in part in 7·17 per cent of the applications disposed of against 7·86 per cent in 1918 and the number of wholly infructuous applications rose by 7,514 to 266,319. The number of debtors imprisoned in execution fell from 2,771 to 2,539.

Execution

Finance

99. The total receipts of civil and criminal courts amounted to Rs. 122·47 lakhs as against Rs. 109·17 lakhs in the previous year and the charges rose from Rs. 89·52 lakhs to Rs. 99·52 lakhs leaving a surplus of Rs. 22·95 lakhs.

REGISTRATION (1919) AND COMPANIES (1919-20)

[*G.Os. No.* 1379, *Home (Judicial), dated the 4th June* 1920, *and No.* 1648, *Home (Judicial), dated the 6th July* 1920; *Statistics of British India, Part VI, Commercial, and Part IV, Administrative and Judicial, etc.—Registration—Indian Companies Act*]

Registration Offices

100. With effect from April 1919, District Registrars were placed on a time scale of Rs. 250—25—500, with two selection posts on Rs. 700 and Rs. 600, and existing incumbents were allowed to count increments as if the scale had been in force on the date of their appointment as District Registrar. The registration district of Bellary with which had always been combined the revenue district of Anantapur was from the 1st September 1919 split up into the two registration districts of Bellary and Anantapur. South Malabar, which was overweighted both as regards the number of sub-offices and the volume of work, was divided on the 1st July 1919 into two separate registration districts under the designations of Calicut and Palghat, the district of North Malabar being re-named Tellicherry. The number of district charges thus rose from 23 to 25 and of District Registrars from 26 to 28. With the cessation of hostilities and the relaxation of financial pressure the relief of the heavier sub-districts which had long been pressing was taken in hand and ten new offices were established in 1919 and an additional Sub-Registrar was appointed to each of the head-quarters sub-districts of Calicut and Madras-Chingleput. The sub-office established at Pugalur (Trichinopoly) in 1912 not having proved successful owing to its situation and the public having requested its removal was amalgamated with that of Karūr, the latter being converted into a joint office presided over by two Sub-Registrars. The arrangement under which the original registration falling to the headquarters sub-district of Madura was distributed between the Registrar's office and four Joint Sub-Registrars, each with distinct jurisdiction and located at no great distance from each other in different parts of the town, was modified at the end of 1919 by transferring three Joint Sub-Registrars to the same building as that in which the Registrar is located. The number of separate sub-offices thus rose from 490 to 493 and of Sub-Registrars from 517 to 529. The adjustment of national interests in the world at large subsequent to the cessation of hostilities tended to drag India out of its seclusion and to render it more amenable to world factors in the matter of prices and cost of labour and the general rise in the former in the principal European countries reacted on India notwithstanding the protection afforded by restrictions on exports. As a result the poorer classes were compelled to sell or mortgage their property in order to tide over their difficulties. This effect was neutralized to some extent by the increasing wealth that flowed into the country during the war, a portion of which passed into the hands of the producer, and the enhanced realizations of the latter as well as the war profits naturally stimulated transactions in land and

Registrations

speculative investments. In 1919 registrations accordingly reached the unprecedented figure of 1,666,358, or an increase of nearly 298,000 over the previous year's figure. Taking the three years ending 1919, registrations numbered 4,394,570 against 3,984,996 in the preceding triennium, or an increase of 10·28 per cent. There was an increase in all districts with the exception of Gōdāvari where the recovery in 1919 consequent on the revival of the trade in coconuts, a staple produce of the delta tracts, did not neutralize the set-back produced by the war on trade and on the money market in the preceding two years. The special local causes which operated in other districts were in Madura and Tinnevelly the partial revival of the cotton trade; in Madras the increased demand for and the rise in value of, house property; in Rāmnād the diversion owing to the war of the capital of the Nattukkottai Chettis from foreign countries to investments within the district; the partial recovery of the groundnut trade in South Arcot and of the industry in silk and cotton weaving in Trichinopoly; the investment in land of their savings by a large number of demobilized men in Salem; and the fact that in the West Coast

districts the retardation of the export of the staple products of copra, coir, pepper and ginger owing to the shortage of tonnage was felt in a marked degree in 1917 and 1919. During the triennium ending 1919, all the important classes of documents showed an increase except leases which declined by 3·32 per cent owing to the absence of renewals which generally take place at fixed intervals. Sales and mortgages, which form the bulk of the registrations, were higher by 16·87 per cent and 7·50 per cent, respectively. The difference in these two percentages indicates that with the rise in the value of land the ryot found it more advantageous to sell outright portions of his holding instead of burdening himself with loans to meet requirements. Concurrently with the increase in registrations the value of registered documents rose from Rs. 127·36 crores to Rs. 157·11 crores or by 23·36 per cent. The aggregate value of transactions relating to immovable property was 24·25 per cent higher, being Rs. 149·20 crores as against Rs. 120·08 crores, the compulsory class contributing to the increase Rs. 28·26 crores and the optional Rs. 0·86 crore. The value of transactions not affecting immovable property rose from Rs. 7·28 crores to Rs. 7·91 crores, the average value of a registered document from Rs. 322 to Rs. 360 and the average registration fee from Rs. 1–7–6 to Rs. 1–8–10. In consequence of the lowering by the High Court, with effect from the commencement of 1919, from Rs. 500 to Rs. 100 of the limit of the value of property in respect of which the production of an encumbrance certificate is compulsory in connexion with court sales, applications for such certificates rose in that year to 48,641 from 27,064 in 1918. The total for the triennium was 102,439 as against 68,597. The increasing and at the same time gratuitous assistance afforded to the co-operative movement by the Registration Department is evidenced by the fact that 54,827 documents were registered and 6,871 searches were made as against 33,561 and 4,962, respectively, representing a fee income of Rs. 1,35,985 as against Rs. 80,579 which was leviable but foregone. The prosecutions instituted by private parties showed a further fall from fourteen to twelve. Including the five cases pending from the immediately preceding triennium convictions were obtained in seven, three were acquitted and seven were pending. There were 33 prosecutions instituted by the department and four were pending at the commencement of the triennium. Conviction was obtained in 24 cases, in ten the accused were acquitted and three cases remained pending. As usual, thumb impressions were of great service in securing convictions in cases of false personation. With the abnormal increase in registrations and searches the total income for the triennium rose from Rs. 70·18 lakhs to Rs. 82·99 lahks or by 18 per cent. Excluding the cost of stationery and paper for books and forms, the total expenditure was Rs. 46·53 lakhs against Rs. 41·24 lakhs.

Prosecutions

Finance

Registered companies

101. The number of Assistant Registrars of Joint Stock Companies increased from 25 to 27 owing to the formation on the 1st July 1919 of an additional registration district in Malabar with headquarters at Palghat and on the 1st September 1919 of Anantapur as a separate registration district. The repeal with effect from the 24th September 1919 of the Indian Companies Restriction Act, 1918, coupled with the industrial awakening of the country and the flow of war profits into speculative investments on the conclusion of peace, stimulated flotations and the number of companies increased from 416 (368 public and 48 private) to 486 (414 public and 72 private) classified as 223 banking and loan, 2 insurance, 123 trading, 56 mills and presses, 18 planting, 3 mining and quarrying, one land and building, 2 breweries, one sugar manufacturing and 57 miscellaneous. Of these 435 have share capital. New registrations, which numbered 86 (63 public and 23 private) against 38 (24 public and 14 private) in the previous year, comprised a large number of trading concerns and with the exception of a dozen all were purely Indian—both satisfactory features. The largest flotations were (i) Binny and Company (Madras), Limited, with an authorized capital of Rs. 50 lakhs and with the object of acquiring the business hitherto carried on by Binny and Company, Limited, incorporated in England and (ii) the Willingdon Spinning

and Weaving Mill Company, Limited (Madras), a cotton mill with a registered capital of Rs. 50 lakhs. Ten " not-for-profit " associations with the object of promoting education and the interests of the trading class obtained licences under section 26 of the Indian Companies Act, 1913. The eleven companies that ceased to exist comprised four nidhis and chit associations, one insurance company, three trading concerns and three planting companies. With the exception of two planting companies the others were Indian. The aggregate authorized and paid up capital of all companies increased from Rs. 11·64 crores and Rs. 6·63 crores to Rs. 14·84 crores and Rs. 7·09 crores, respectively, and the average paid up capital was Rs. 1·63 lakhs against Rs. 1·78 lakhs. The number of companies incorporated outside British India having a place of business in the Madras Presidency rose to 140. Of the five cases of non-compliance with the provisions of the Act, three ended in conviction, one was withdrawn as the company concerned went into liquidation and the fifth was pending disposal. The receipts and expenditure were Rs. 26,462 and Rs. 14,034 against Rs. 10,968 and Rs. 11,786 respectively. The number of certificated auditors at the close of the year was 36, comprising four unrestricted permanent, one unrestricted temporary, nine restricted permanent and 22 restricted temporary. With the object of creating a class of independent and full-time auditors the certificates of such of the auditors who took to auditing only as a subsidiary occupation were not renewed and the grant of the certificate will for the future be ordinarily restricted to the holders of the Bombay Government Diploma in Accountancy. No society was registered under the Provident Insurance Societies Act, 1912; one society went into liquidation leaving twelve at work at the close of the year. The six life assurance companies continued to work. Revised rules under the Indian Life Assurance Companies Act, 1912, were issued by the Government of India in January 1920.

Provident Insurance Societies Act, 1912

Notaries Public (1919-20)

102. The number of notarial stations (141) remained unchanged but that of registering officers exercising the functions of Notaries Public rose from 185 to 187 in consequence of the constitution of two new registration districts (Palghat and Anantapur), the Registrars of which were appointed Notaries Public. The operations related to 19 stations as against 17 in the previous year. A slight increase occurred under promissory notes and there was a fall under all the other items. In Udipi (South Kanara district) there was an increase in the number of bills of exchange dealt with owing to the fact that the Kanara Banking Corporation, Udipi, issued these instruments in preference to obtaining promissory notes executed in favour of the bank. The fall in the total number of instruments dealt with was due to the stringency of the money market, dullness of trade and restrictions on exports and imports coupled with high prices of articles. The scope for the issue of bills of exchange or promissory notes was thus limited, agents arranging for direct cash payments. Consequent on the fall in the number of operations the aggregate value of transactions dropped from Rs. 1·78 lakhs to Rs. 1·39 lakhs. The fees realized amounted to Rs. 291–10–0 against Rs. 378–8–0 in 1918–19 and a sum of Rs. 20–13–0 was expended by the Notaries Public against Rs. 52–14–6. The balance of Rs. 270–13–0 was remitted into the treasury. No office of a Notary Public was inspected during the year by the District Judge under rule 4 of the Notarial Rules.

CO-OPERATIVE SOCIETIES

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Report on the working of the Co-operative Societies Act for the year 1919–20; Statistics of British India, Vol. II, Financial Statistics, Part I, Co-operative Societies*]

General

103. The most important event of the year was the sanction accorded by Government to a scheme of development of the co-operative movement under which there will be an Assistant Registrar for almost every district of the Presidency so as to render the extension of the movement possible within the next few years to the very large area which still remains untouched. Thirty-five administrative unions were added during the year bringing the total of such unions to 138. The number of primary societies under the control of local unions for purposes of supervision was 3,540 as against 2,826 in the previous year. The number of societies of all kinds registered during the year was 1,365 ; the registration of 14 was cancelled ; the total number of societies thus increased from 3,676 to 5,027. On the last day of the year there were 329,886 members in 4,889 societies (excluding unions) as against 244,297 in the previous year, giving an average of 67 members to a society, or one less than in the previous year. The number of Panchamas admitted into agricultural societies rose, by 7,634, to 17,684, the large increase being due to the special efforts made by the labour department and by the Y.M.C.A. The total working capital of all societies increased from Rs. 305·21 lakhs to Rs. 394·25 lakhs, their paid-up share capital from Rs. 34·69 lakhs to Rs. 50·24 lakhs and their reserve funds from Rs. 14·65 lakhs to Rs. 17·42 lakhs. Loans from central banks and other societies to primary societies increased from Rs. 100·97 lakhs to Rs. 131·66 lakhs. The total cost of working the Act to Government was Rs. 3·09 lakhs which was equivalent to 0·785 per cent of the working capital of societies as against 0·740 per cent in the previous year.

Working of societies

Provincial and District banks

104. The proposal to convert the Madras Central Urban Bank, Limited, into a federation of central banks took definite shape during the year and the by-laws were suitably amended. According to the new constitution only the central banks are permitted to take shares in the provincial bank, each being allowed a seat in the directorate, and the primary societies which had already taken shares in it have been allowed to transfer their shares to the central banks to which they are affiliated. Before the close of the year, the central banks had invested as share capital Rs. 1·44 lakhs in the Provincial Bank. The net profit of the bank amounted to Rs. 0·70 lakh as against Rs. 0·64 lakh in the previous year, but the sum available for distribution was only Rs. 0·45 lakh, the balance, which was written off in the year, representing the depreciation in the value of the Government promissory notes held by the bank. Four new central banks were started during the year. The share capital of all the financing banks in the Presidency rose from Rs. 11·29 lakhs to Rs. 17·32 lakhs and their reserve funds from Rs. 3·07 lakhs to Rs. 3·67 lakhs. Their owned capital thus amounted to Rs. 21 lakhs which represents 19·82 per cent of the total amount borrowed from outside the movement, as against 17 per cent in the previous year. The total amount so borrowed by banking unions was Rs. 105·90 lakhs as against Rs. 84·49 lakhs in the previous year. There was a very slight fall in the percentage of overdues in arrear interest and a slight increase in current interest. The percentage of balance to demand was 10·30 principal, 13·36 arrear interest and 5·27 current interest as against 14·16, 13·75 and 4·59, respectively, in the previous year.

Agricultural societies

There were 4,156 agricultural credit societies at the end of the year, or 1,108 more than in the previous year, of which eight continued to work on a limited liability basis. There was some improvement in the admission of poor villagers as members of societies. The number of tenants increased from 16,853 to 24,412 while that of field labourers rose from 4,111 to 10,324. This result, though not very satisfactory, indicates that a change is gradually taking place in the attitude of the land-owning

classes. The total working capital of these societies increased from Rs. 122·95 lakhs to Rs. 156·86 lakhs and their paid-up share capital from Rs. 9·91 lakhs to Rs. 14·07 lakhs. The deposits taken from individuals rose from Rs. 10·65 lakhs to Rs. 12·90 lakhs and the loans from financing banks outstanding against the societies rose from Rs. 94·56 lakhs to Rs. 121·13 lakhs. The net profits earned by the societies after recouping the losses of the previous years amounted to Rs. 2·09 lakhs as against Rs. 1·72 lakhs in the previous year. The total number of agricultural societies and unions which were engaged in work other than credit rose by 27 to 58. Besides the activities of trading unions and stores, the joint purchase by some societies of the requirements of members of ordinary credit societies was considerably stimulated by the prevailing high prices of almost all the necessaries of life. In the case of Burma rice and some other foodstuffs the societies arranged for sale to non-members also. Some societies were able to do some work in the joint sale of the produce of their members. Besides these there were other institutions designed for specific purposes which were engaged in other kinds of activities. The number of non-agricultural credit societies rose from 361 to 478 of which 360 were on the limited liability basis and 118 on the unlimited liability basis as against 266 and 95 in the previous year. Their total working capital increased from Rs. 40·27 lakhs to Rs. 53·10 lakhs and the net profits from Rs. 1·17 lakhs to Rs. 1·68 lakhs. The percentages of balance to demand under principal, overdue interest and current interest were 11·01 (principal), 39·34 (arrear interest) and 9·98 (current interest) as against 11·11, 39·67 and 11·02, respectively, in the previous year. The share capital of these societies rose from Rs. 11·04 lakhs to Rs. 14·70 lakhs ; their deposits from Rs. 23·12 lakhs to Rs. 29·35 lakhs ; and their borrowings from central and other societies from Rs. 4·18 lakhs to Rs. 6·66 lakhs. The reserve fund amounted to Rs. 2·39 lakhs as against Rs. 1·93 lakhs in the previous year. As in the previous year many societies worked for the exclusive benefit of particular classes. The number of weavers' societies amounted to 21 and there was an equal number of other forms of societies as against 12 in the previous year under each category. The latter comprised 14 building societies, two societies for printing, two for supply of labour and one each for managing a students' hostel, for supply of stationery and other articles to students and a conveyance society. Good progress was made during the year in the formation of societies exclusively for the benefit of the backward classes. The number of societies registered during the year exclusively for Panchamas was 175. For municipal sweepers and scavengers four were registered, thus increasing the number of such societies to 42. On the Nilgiris nine societies were organized for the Badagas, one for the Kotas and one for the Todas and at the end of the year there were 54, three and two societies, respectively, for these tribes. A society was started for the benefit of the Savaras and that for Malayalis on the Kollimalais worked well during the year.

Non-agricultural societies

Miscellaneous

105. The total number of local unions rose from 103 to 136 and 3,540 societies were affiliated to them as against 2,568 in the previous year. There were 889 agricultural societies not affiliated to any of the local unions as against 410 in the previous year. All the central banks in the Presidency made the usual contribution to the supervision fund. The arrangement for supervision by non-official agency in union areas was complete by itself. There was a fall both in the number of suits filed in civil courts and before arbitrators. The arbitration rules were availed of very largely. The annual Provincial Conference was held in Madras in December 1919. There were also many district conferences most of which were attended by the Registrar and a large number of union and taluk conferences attended by Assistant Registrars. In April 1920 a conference of representatives of central banks and Assistant Registrars was held at which important questions connected with the federation of central banks were discussed. The attitude of the general public towards the movement continued to be very cordial and the department was assisted by many public-spirited gentlemen of all classes.

LOCAL BOARD ADMINISTRATION (1919–20)

[*Statistics of British India, Vol. IV, Local Self-Government—District and Sub-District Boards*]

General Constitution and strength of boards

106. The number of district boards in the Presidency continued to be 25. The maximum strength of two of these was increased and as a result there was an addition of five members bringing their total strength to 862. At the end of the year 803 members, or 32 more than in 1918–19, took part in the deliberations of the district boards in the Presidency. Of these 125 were ex-officio, 195 nominated by Government, and the remaining 483 elected by taluk boards, the corresponding figures for the previous year being 126, 260 and 385, respectively. Three hundred and two meetings, or 11 more than in 1918–19, were held by district boards. The number of taluk boards continued to be 97. The number of boards which elected their own presidents increased from 10 to 13 and 50 others, or six more than in the previous year, had non-official presidents. The sanctioned strength of taluk boards increased, by 61, to 1,808 and in consequence the actual number of members at the end of the year rose, by 38, to 1,603, of whom 264 were officials and 1,339 non-officials as against 331 and 1,234, respectively, in the previous year. Of the 454 seats open to election in the year, 420 were actually so filled, and in the case of 207 elections which were contested, 47·8 per cent of the registered voters came to the poll as against 45·5 per cent in 1918–19. The number of seats which had to be filled up by presidents of district boards by nomination, because no candidates were proposed, increased from 22 to 28. One thousand two hundred and seventy meetings, or 28 less than in the previous year, were held by taluk boards. The number of union panchayats which assisted in the administration of local affairs in important villages rose, by 42, to 577, and there was no change in their functions. The number of panchayatdars rose, by 193, to 4,934, of whom 1,007 were village headmen, 2,996 were nominated and 931 elected.

District boards

Taluk boards

Union panchayats

Finance Receipts

107. The land cess was levied at As. 2 on every rupee of the land receipts assessment on the Nilgiris, at rates varying from As. 1–6 to As. 2 in Malabar, at As. 1–6 in South Kanara and at one anna in the remaining districts. In addition to that cess a special cess of three pies in the rupee on the annual rent value of all occupied lands was levied in sixteen districts for the construction of railways. Tolls upon carriages, carts and animals were collected in all districts. House-tax was levied in all unions excepting eight which were constituted late in the year; the tax was levied in the Villupuram and Palacole unions up to 1st September and 1st December 1919, respectively; the maximum rates were in force in 530 cases; three-fourths in 23, three-fifths in one and half rates in the remaining 17. Excluding the transactions under debt heads, the year opened with a balance of Rs. 247·33 lakhs, or Rs. 38·40 lakhs more than in 1918–19. The receipts fell, by Rs. 11·04 lakhs, to Rs. 228·61 lakhs. Including the receipts from the special railway cess, the revenue from rates and taxes rose, by Rs. 4·38 lakhs, to Rs. 112·42 lakhs. Increases occurred under all heads. There was a rise under land and railway cesses in 18 districts and a fall in 7 districts. The income from tolls showed an improvement in 15 districts, noticeable increases occurring in Trichinopoly, Kistna, Malabar, Rāmnād and Salem. The grants received from Provincial funds amounted to Rs. 65·81 lakhs. A sum of Rs. 17·28 lakhs was granted in aid of the general resources of local boards, but a sum of only Rs. 13·21 lakhs was disbursed in the year; Rs. 32·90 lakhs were granted for education, Rs. 11·34 lakhs for roads and bridges, Rs. 0·96 lakh for hospitals and dispensaries, Rs. 1·95 lakhs for medical buildings, Rs. 2·99 lakhs for minor sanitary works, Rs. 0·50 lakh for water-supply and drainage schemes, Rs. 0·21 lakh for the improvement of pilgrim centres, Rs. 1·00 lakh for house-sites for depressed classes and Rs. 0·32 lakh for choultries. The grants for public works were paid as usual to the District Boards of the Nilgiris (Rs. 1·08 lakhs) and Koraput (Rs. 0·24 lakh) in consideration of the smallness of their revenues.

The contributions to the general resources of local boards included lump assignments intended to enable them to equip and maintain their own elementary schools adequately. The grants towards hospitals and dispensaries were intended to meet the provincial share of the pay and allowances of medical subordinates employed by local boards and half the cost of the maintenance and equipment of hospitals and dispensaries opened after 1915, and the grants for choultries consisted mainly of lump payments made in lieu of the income from lands originally endowed therefor by their founders but subsequently resumed by Government.

Expenditure

108. Excluding the charges relating to debt heads and contributions from one district board to another and an expenditure of Rs. 0·38 lakh which though debited to service heads was met from loans credited to debt heads, and adding repayments of loans amounting to Rs. 3·02 lakhs, the total expenditure of local boards rose, by Rs. 17·78 lakhs, to Rs. 221·17 lakhs, and the year closed with a balance of Rs. 254·77 lakhs.

Public works

The outlay on public works rose, by Rs. 12·09 lakhs, to Rs. 103·53 lakhs ; Rs. 31·45 lakhs were spent on the construction of roads, bridges, schoolhouses, dispensaries, markets and other miscellaneous public improvements and the remainder on repairs to existing works. The length of the new roads constructed was 158 miles against 231 miles in the previous year ; the expenditure on this account was Rs. 2·78 lakhs against Rs. 2·82 lakhs. A length of 13,739 miles of road was repaired as against 13,690 miles in the previous year and the outlay thereon increased from Rs. 49·51 lakhs to Rs. 51·77 lakhs.

Education

At the close of the year local boards maintained 38 sessional schools for the training of teachers, one Sanskrit college, 121 secondary schools and 8,240 elementary schools. In the sessional schools 854 students received instruction and the attendance at all schools rose, by 35,758 pupils, to 465,290 pupils. The total expenditure of local boards on education was Rs. 46·80 lakhs as against Rs. 37·33 lakhs in the previous year towards which fees contributed Rs. 5·35 lakhs while contributions from municipal councils and private individuals and other miscellaneous receipts amounted to Rs. 0·51 lakh. A sum of Rs. 26·75 lakhs was spent out of provincial grants and the net local fund outlay was thus Rs. 14·19 lakhs or 16·5 per cent of the total ordinary income of local boards as against Rs. 11·20 lakhs and 13·2 per cent in the previous year.

Medical institutions

The number of hospitals maintained by local boards increased by two to 118 and the number of dispensaries by three to 301. The cost of maintenance increased, by Rs. 4·81 lakhs, to Rs. 15·64 lakhs, but the number of patients treated in them fell further, by 133,315, to 4,337,242.

Vaccination

The number of vaccinators including probationers employed by district boards was 479 or 17 less than in the previous year. The average cost of each successful operation rose from As. 6–2 to As. 6–10.

Sanitation

The expenditure on sanitation increased by Rs. 2·71 lakhs to Rs. 14·06 lakhs ; special attention was paid to rural water-supply as in the previous year.

Railways

109. The District Boards of Coimbatore, Tanjore, Guntūr, Kistna and Salem possess open railways. The balance in Government securities in favour of the railway fund of the Tanjore District Board at the beginning of the year was Rs. 30·73 lakhs ; there was besides a balance of Rs. 1·39 lakhs in cash. The gross traffic earnings increased, by Rs. 2·15 lakhs, to Rs. 10·99 lakhs, and the working expenses also rose, by Rs. 2·13 lakhs, to Rs. 6·76 lakhs. The district board repaid Rs. 0·71 lakh to provincial funds towards the recoupment of the Government share in the railway, which is treated as a loan and paid Rs. 0·23 lakh to debenture holders as interest and Rs. 0·56 lakh to the sinking fund towards the liquidation of the debenture loan. The profit derived from the working of the railway was Rs. 4·23 lakhs or 7·8 per cent of the capital outlay or a little more than in 1918–19, and at the end of the year the balance in favour of the fund after taking into account all charges and receipts was Rs. 33·74 lakhs in Government securities and Rs. 1·87 lakhs in cash. The sinking fund for the repayment of the debenture loan amounted to Rs. 6·93 lakhs invested in Government securities. In Kistna the opening balance of the railway-

cess fund was Rs. 23 lakhs in Government securities and Rs. 1·23 lakhs in cash; the gross earnings of the railway increased, by Rs. 0 99 lakh, to Rs. 4·79 lakhs, and the working expenses, by Rs. 0·45 lakh, to Rs. 2·16 lakhs. The district board repaid a sum of Rs. 0·96 lakh to provincial funds towards the Government loan taken for the construction of the line. The profit on the working of the railway was Rs. 2·63 lakhs or 11·7 per cent of the capital outlay as against 9·3 per cent in the previous year, and the closing balance in favour of the fund was Rs. 2·3 lakhs in Government securities and Rs. 1·23 lakhs in cash. The opening balance of the railway-cess fund in Coimbatore was a little over Rs. 6 lakhs in Government securities with a cash balance of Rs. 0·43 lakh. The gross earnings of the railway were Rs. 2·51 lakhs and the working expenses Rs. 1·18 lakhs. The district board paid Rs. 0·23 lakh as interest on the loan borrowed from the public. The profit on the working of the railway was Rs. 1·33 lakhs or 11·7 per cent of the capital outlay as against 8·9 per cent in the previous year and at the end of the year the balance in favour of the fund was a little over Rs. 6 lakhs in Government securities and Rs. 2·29 lakhs in cash. The opening balance of the railway-cess fund in Guntūr amounted to Rs. 3·76 lakhs in Government securities and Rs. 0·11 lakh in cash. The gross earnings of the railway amounted to Rs. 1·20 lakhs and deducting 50 per cent thereof for working expenses the net earnings amounted to Rs. 0·60 lakh or 4 per cent on the capital outlay as against 3·4 per cent in the previous year. The closing balance of the railway-cess fund was Rs. 3·97 lakhs in Government securities and Rs. 1·47 lakhs in cash. In Salem the railway-cess fund opened with a sum of Rs. 7·15 lakhs invested in Government securities and Rs. 0·12 lakh in cash. The net earnings of the railway amounted to Rs. 0·31 lakh or 6·54 per cent of the capital outlay as against 2·6 per cent in the preceding year. The closing balance of the railway-cess fund amounted to Rs. 7·15 lakhs in Government securities and Rs. 0·13 lakh in cash. No new lines were constructed during the year. The Tirutturaippūndi-Vēdāranniyam Railway in the Tanjore district (23·12 miles), completed in December 1916 and kept closed on account of war conditions, was opened for traffic on the 15th May 1919.

MUNICIPAL ADMINISTRATION—MUFASSAL (1919–20)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

General

110. The total number of municipal councils rose from 72 to 73. Villupuram was constituted a municipality from 1st September 1919. Palacole and Chirala were also constituted into municipalities with effect from 1st December 1919 and 1st January 1920, respectively, but began actual work only on 1st April 1920. The number of councillors was raised from 1,196 to 1,228. The actual number at the end of the year was 1,082 of whom 98 were ex-officio, 316 nominated by the Government and the remaining 668 elected by the rate-payers. The system of appointing councillors by election was in force in 69 municipalities. The proportion of Indian to European and Eurasian members increased further and 41 councils consisted entirely of Indian members as against 32 in the previous year. The councils held 2,020 meetings, or 120 more than in the previous year. One hundred and sixteen meetings were adjourned for want of a quorum. The average attendance of councillors at each meeting was 59·5 per cent of the total strength as against 58·69 per cent in 1918–19.

Finance Receipts

111. As regards the financial position, the opening balance was Rs. 33·27 lakhs as against Rs. 34·02 lakhs in 1918–19. Current receipts increased by Rs. 15·55 lakhs, the total being Rs. 110·18 lakhs. Increases occurred mainly under "Grants from Government" and "Advances" recovered from sale of rice. There were also increases in the income derived from the following taxes: buildings and lands, from Rs. 18·66 lakhs to Rs. 19·66 lakhs;

water and drainage tax, Rs. 8·94 lakhs to Rs. 9·37 lakhs; tax on arts and professions, Rs. 3·33 lakhs to Rs. 3·62 lakhs; tolls, Rs. 9·35 lakhs to Rs. 9·84 lakhs; on the other hand there was a decline under sale-proceeds of land and produce of land from Rs. 3·06 lakhs to Rs. 1·38 lakhs. The average incidence of taxation per head of the population rose from Rs. 1–15–0 to Rs. 2–0–3. It was as usual relatively high, and higher than in the previous year, in the hill municipalities where it ranged from Rs. 5–11–11 to Rs. 10–9–11; in the plains it ranged from As. 7-3 to Rs. 4–10–9. There was an increase of Rs. 4·74 lakhs in the grants and contributions paid by Government. The total grants, which amounted to Rs. 18·22 lakhs, were utilized for general purposes (Rs. 10·38 lakhs), education (Rs. 6·72 lakhs) and medical relief (Rs. 1·12 lakhs). Loans amounting to Rs. 4·50 lakhs were advanced to municipal councils by Government as against Rs. 3·15 lakhs in the previous year. The Madura Municipal Council took loans aggregating Rs. 3·05 lakhs for drainage works and for the Madichiyam town extension scheme.

Loans

Expenditure

112. The expenditure rose, by about Rs. 10·98 lakhs, to Rs. 104·58 lakhs. Expenditure on Public Works amounted to Rs. 27·78 lakhs, or about 26·5 per cent of the total charges, of which Rs. 8·85 lakhs were spent on communications. The Public Works Department had under execution water-works in five municipal towns, two of which, in Ellore and Erode, were completed and opened during the year. Improvements and extensions to the existing water-works in seven other municipalities and drainage schemes for two towns were also under execution. Two water-supply schemes (partial) and four schemes of improvements to existing water-works were sanctioned for execution. Twenty-one water-supply schemes, four schemes for improving existing works, twenty-one drainage schemes and three schemes of improvements to existing drainage works were under consideration. The Government took over the management from municipalities of the hospitals at two district headquarter stations (Mangalore and Kurnool) in addition to the fourteen taken over in the previous year. One branch dispensary was opened at Waltair (Vizagapatam). The arrangements for medical relief to the public in the other municipalities continued to be the same as in the previous year. The number of in-patients treated fell, by 867, to 35,478. There was also a decrease in the number of out-patients, by 48,283, to 2,023,004. The cost of maintenance, however, rose, by Rs. 0·61 lakh, to Rs. 7·97 lakhs. There were 895 educational institutions maintained by municipal councils, or 82 more than in the previous year. Two colleges and three secondary schools were taken over by Government, while two private institutions were taken over by municipal councils. The number of colleges and secondary schools maintained by councils thus declined from 32 to 29. The number of elementary schools, however, increased, by 85, to 866. The number of elementary schools which the councils aided with teaching grants also rose from 189 to 211. The net educational charges amounted to 5·85 per cent of the income from general taxation. The expenditure on conservancy was Rs. 17·45 lakhs and that on lighting Rs. 4·05 lakhs as against Rs. 14·80 lakhs and Rs. 3·82 lakhs, respectively, in the previous year. The closing balance of the year was Rs. 38·87 lakhs.

Public works

Medical

Education

Sanitation

Debt

113. The public debt outstanding against municipalities rose from Rs. 31·37 lakhs to Rs. 33·61 lakhs. Sinking funds amounted to Rs. 1·33 lakhs.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS (1919-20)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

Finance

114. The total receipts of the Corporation inclusive of the opening balance amounted to Rs. 58·29 lakhs as against Rs. 55·62 lakhs in the previous year and the expenditure was Rs. 52·56 lakhs against Rs. 44·73 lakhs. The income from municipal rates and taxes was Rs. 26·94 lakhs or Rs. 1·98 lakhs more than in the previous year. This increase was due to the revised scale of taxes levied under the new Act during the second half year and to revision of assessments on buildings and lands. The incidence of taxation per head of the population was Rs. 5–3–1 against Rs. 4–12–11 in 1918–19. The revenue derived from municipal property and powers apart from taxation, was Rs. 5·45 lakhs or Rs. 0·09 lakh less than in the previous year. The grants and contributions from Government and private individuals amounted to Rs. 6·42 lakhs as against Rs. 1·60 lakhs in 1918–19 and were made up of a contribution of Rs. 0·40 lakh, a special grant of Rs. 6 lakhs for the improvement of water-supply and drainage works and for sanitary works and a grant of Rs. 2,000 from a private gentleman for constructing a Free Public Reading Room in the model playground at Egmore. Miscellaneous receipts rose from Rs. 3·86 lakhs to Rs. 7·71 lakhs. This increase was due to the sale-proceeds of the Royapettah hospital buildings realized from Government, to the enhancement of the rate for water for non-domestic purposes and to the reduction of the free allowance of water to houses. The debt at the close of the year was Rs. 106·82 lakhs. A sum of Rs. 1·44 lakhs was paid towards the repayment of Government instalment loans amounting to Rs. 29 lakhs and Rs. 4·72 lakhs for interest on all loans. The sinking funds at the end of the year on account of the several loans, exclusive of the Government instalment loans, amounted to Rs. 28·93 lakhs in Government promissory notes, stock-certificates and Madras Municipal debentures and Rs. 3,767 in cash.

Works

115. The expenditure on works amounted in all to Rs. 20·56 lakhs or 39·1 per cent of the total expenditure as against Rs. 20·20 lakhs in the previous year. Of this sum Rs. 5·68 lakhs or 10·8 per cent were spent on new works, Rs. 13·67 lakhs or 26·0 per cent on repairs and Rs. 1·21 lakhs or 2·3 per cent on establishment, tools and plant. A sum of Rs. 0·47 lakh was spent on new works, such as the acquisition of lands and buildings for widening roads and rounding off corners, the construction of culverts and footpaths and the widening of bridges for laying new tram lines. The amount spent on repairs was Rs. 4·48 lakhs as against Rs. 3·73 lakhs in the previous year. During the year 35·83 miles of road were reformed against 41·61 miles in 1918–19. Over two miles of unmetalled roads were metalled for the first time and nearly the same length of roads was tarred. In addition 4 miles 2 furlongs and 204 yards of roads were retarred. Repairing of bridges and culverts was also carried out. The expenditure on new works was Rs. 0·96 lakh and that on repairs Rs. 0·49 lakh. Two schools which were in progress in the previous year were completed during the year and the construction of two more schools was in progress. A manual training class shed was also constructed in one of the model schools. Flush-out latrines were constructed at several places and the construction of a lorry loading station and of a laboratory was in progress. The dhobikhana buildings, which were under progress in the previous year, were completed during the year and the construction of dwelling-houses for scavengers was in progress. A bathing fountain with six taps was erected and the quarters for filter-bed overseers were in progress during the year. The amount spent on drainage works was Rs. 4·27 lakhs and on maintenance Rs. 6·21 lakhs. Owing to the difficulties of labour, scarcity of fuel, and the large demand for the home market the firms in England were not in a position to supply materials and only such works as could be done with materials obtainable in India were

Communications

Buildings

Drainage

executed. The principal works under construction were the pumping stations at Ice House Road, Napier Park and Purasawakam ; Napier Park Gravitation main ; sewer laying in Triplicane, Georgetown and Purasawakam ; pumping main and anti-malaria drainage channel in Purasawakam and storm-water drainage in Basin Bridge Road, Triplicane High Road and Ice House Road. The principal works completed were storm-water drainage in South Triplicane, Egmore and Salt Depôt, 24-in. gravitation main along China Bazaar Road and out-fall channel at the sewage farm. A storm-water separator and 6-in. open masonry drains were also constructed.

Water-supply

The expenditure on water-supply works was Rs. 0·23 lakh and that on maintenance Rs. 2·47 lakhs. The quantity of water supplied during the year was 5,110·1 million gallons, which was equivalent to 26·6 gallons per head per day. The maximum average daily consumption per head in any month was 30·35 gallons and the minimum 23 gallons. During the year 15,935 houses were inspected and 1,869 defects in the services were brought to notice. Four hundred and thirty-six new services were laid by licensed plumbers and 3,475 were repaired, cleaned, altered or extended. The total number of house service connexions in the city on 31st March 1920 was 30,263. The length of pipes removed, cleaned and relaid was 3,433 feet and that for new mains laid 6,686 feet. Eleven valves, 38 stop cocks, 11 hydrants and 96 meters were fixed. There were at the close of the year 1,484 fountains, 74 cattle troughs and 11 bathing fountains. The quantity of water supplied to the city as measured at Red Hills was 870,492,590 c.ft., or 21,690,836 c.ft. more than in the previous year.

Education

116. The expenditure on education was Rs. 0·71 lakh as against Rs. 0·53 lakh in the previous year. The total number of schools at the close of the year was 27, and there were 3,587 boys and 568 girls on their rolls on 31st March 1920. There were 154 teachers in the Corporation schools and all are professionally qualified. Twenty-two of the schools engaged the pupils in wood-work as a part of manual training and a beginning was made in one of the schools in imparting vocational training to the pupils by the institution of tailoring as a handicraft. In addition attention was paid to manual training and gardening by the pupils in all the schools. The opening of a communal playground in Egmore has thrown open a splendid opportunity for physical recreation.

Sanitation and medical service

117. A sum of Rs. 8·05 lakhs or 15·3 per cent of the total expenditure was spent on sanitation and conservancy during the year as against Rs. 6·08 lakhs in the previous year. The cost of maintenance of the

Hospitals and dispensaries

Corporation hospitals and dispensaries amounted to Rs. 0·95 lakh as against Rs. 0·94 lakh in 1918–19. The total number of patients treated in them was 179,275 against 172,378 in the previous year. The usual contributions of Rs. 0·20 lakh to Government on account of hospitals and of Rs. 0·16 lakh to other medical institutions were paid.

Vaccination and registration of births and deaths

The amount spent on vaccination and registration of births and deaths was practically the same as in the previous year, namely, Rs. 0·38 lakh. The total number of cases vaccinated in the city in the calendar year 1919 was 32,231 and the percentages of success in primary vaccination and re-vaccination cases were 95·77 and 46·07, respectively, as against 97·79 and 55·24 in 1918. The number of children under one year vaccinated was 15,036. The number of births and deaths registered in 1919 was 18,936 and 27,187, respectively, as against 19,897 and 31,262 in 1918. The birth and death rates were respectively 36·5 and 52·4 per mille as against 38·4 and 60·3 per mille in

Plague

1918. The number of attacks and deaths from plague was 15 and 14, respectively. The number of rats caught and destroyed was 161,194 making a total of 2,576,501 since the beginning of the operations in July

Anti-malarial operations

1898. The number of tanks cleaned and re-cleaned was 544 ; 6,056 pits and cess-pools, 165 tanks, 1,058 ponds, 33 low lands and 30 wells were also petrolized every week. Three thousand six hundred and forty-eight wells were examined to ascertain whether the fish that had been introduced in them were alive and in 2,120 or 58·1 per cent the wells were

found fishless. Malaria accounted for 2·7 per cent of the total deaths as against 2·8 per cent in 1918, which gives a death-rate of 1·4 per mille.

118. A sum of Rs. 2·79 lakhs was spent on lighting and the cost of maintenance alone amounted to Rs. 0·84 lakh. During the year 687 new electric lights were installed and 9 removed. The number of electric lights on 31st March 1920 was 3,708. There were also 3,176 oil lamps. The public parks were maintained at a cost of Rs. 50,865 as against Rs. 43,921 in the previous year. The cost of the maintenance of fire-engines was Rs. 24,439 against Rs. 17,133 in 1918–19. These engines were requisitioned on 54 occasions but they worked in only 19 cases. Miscellaneou

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MARINE (1919–20)

[*Reports of the Madras Port Trust and the Madras Port Department for 1919–20; Statistics of British India, Vol. IV, Local Self-Government—Port Trusts. Accounts relating to the Sea-Borne Trade of British India. Annual Statement of the Foreign Sea-Borne Trade and Navigation of British India*]

119. During the year the receipts of the Port Trust on revenue account from all sources were Rs. 25·50 lakhs as against Rs. 19·48 lakhs in 1918–19, an increase of about 30·88 per cent. But a sum of Rs. 7·37 lakhs of the receipts is ascribable to the imposition of 75 per cent super dues on imports and exports. If contributions made by revenue to capital which amounted to Rs. 5·08 lakhs be not counted, the gross expenditure was Rs. 16·76 lakhs or 65·72 per cent of the gross receipts. Excluding from working expenses the interest on loans which amounted to Rs. 5·61 lakhs actual working expenses came to about 43·73 per cent of harbour earnings against 43·69 per cent in 1918–19. The harbour dues alone excluding charges for specific purposes, such as cranage and storage, came to Rs. 17·21 lakhs. The new Municipal Act came into force on the 1st October 1919. Under it the Port Trust is liable to taxation up to a maximum of 4 per cent of the Trust's gross receipts. The first payment on this account was made during the year under review. Madras Port Trust Finance

120. A large quantity of material hung up in the manufacturers' yards in England on account of the war was received during the year; the chief items being a third hydraulic engine for the powerhouse and four travelling hydraulic luffing cranes, 50 feet maximum radius, three of them having a lifting capacity of 35 cwt. and one of five tons. These cranes were installed on the west quay and work direct from ship's holds to the quay or railway wagons. The semi-permanent head of the cyclone restoration work composed of horizontal block work, was completed to 10 feet above water during the year. This added a length of 67 feet to the rebuilt portion of the breakwater making the present sheltering arm 1,600 feet. In this work 181,146 cubic feet of block work were used, making a total of 440,009 cubic feet of block work built into position since the commencement of the rebuilding. During the year 154 blocks, 64,072 cubic feet in volume, were manufactured. The steel work for the 48′ diameter well caisson, which is to form the permanent head to the sheltering arm, did not arrive till November: the pumps for use in sinking it, expected in November, were held up on account of the moulders' strike. The cutting edge and four strakes of the caisson, a total height of 25 feet, were erected on the slipway and launched shortly after the close of the year under review. The work of replacing the timber struts with 6-inch diameter steel struts in the south quay was completed. The renewing of the oil-pipe lines on north pier was completed Works

during the year. The erection of 'Z' warehouse, 500 feet × 120 feet double storey, was in progress. The suction dredger "Madras" worked for 59½ days outside the new entrance, deepening the approach channel and for 91½ days inside the harbour chiefly in the south-east corner. The material in the entrance channel is a fine silt very difficult to deal with as it settles very slowly in the hoppers and the quantity dredged was consequently considerably below the average. This dredger was sent to Calcutta on 19th January 1920 for overhaul and returned to Madras on 10th March 1920. The bucket dredger "Triton" worked throughout the year inside the harbour deepening berths. She was laid up for a total of 53 days during the year while undergoing minor repairs.

Trade

121. The total tonnage of goods which passed through the port in the year amounted to 878,441 tons, or an increase of 268,961 tons over that of the previous year. The total tonnage of imports and exports by sea was 739,756 tons against 543,714 tons in 1918–19. The outstanding feature of the year was the heavy import of food-grains totalling over 300,000 tons. In the four months, June to September 1919, 141,025 tons of rice and other food-grains were landed and 130,415 tons despatched; the best day's landing was 2,820 tons and despatch 2,520 tons. Valuable experience was gained during this rush of traffic and it is now clear that given grain cargoes with a reasonable number of marks and an adequate wagon supply, some 50,000 tons of food-grains a month can be comfortably dealt with, without interfering with the ordinary traffic of the port. The import of mineral oil was again a record amounting to 129,100 tons. At present much of the petrol for the Bombay Presidency is landed at Madras in bulk and railed over to Bombay. There was some improvement in the shipment of groundnuts but the total quantity exported was still below the pre-war figure. In hides and skins there was a fall of 2,545 tons, the quantity exported being 22,658 tons. The shipment of cotton manufactures was double that of the previous year amounting to 4,693 tons; though not up to the pre-war figure it is interesting to note that the tonnage of piece-goods exported exceeded, for the first time, the tonnage of piece goods imported which was the lowest on record. The value of the private trade in foreign merchandise from foreign ports amounted to Rs. 1,065 lakhs as against Rs. 938 lakhs in the previous year. In Indian merchandise from Indian ports the trade rose from Rs. 392 lakhs to Rs. 588 lakhs showing an increase of 50 per cent. There was a considerable increase in the value of trade of Indian merchandise to foreign ports amounting to Rs. 1,712 lakhs as against Rs. 1,123 lakhs in the previous year. The value of Indian merchandise to Indian ports was Rs. 185 lakhs as against Rs. 110 lakhs in the previous year showing an increase of Rs. 75 lakhs.

Minor ports
Finance

122. The release in increasing numbers of steam tonnage used for war purposes and the provision of new tonnage contributed to the general revival of trade as also to the increase in the total tonnage that entered the minor ports with a corresponding rise in the port and coast light dues. There was however a considerable falling off in the number of vessels entering the ports apparently due to lack of freight for wooden tonnage. The receipts of Port, Marine and Coast Light Funds amounted to Rs. 10·15 lakhs and the expenditure to Rs. 8·49 lakhs. The closing balance consisted of Rs. 5·21 lakhs in cash and Rs. 14·36 lakhs in Government securities. The port dues collections amounted to Rs. 2·24 lakhs as against Rs. 1·27 lakhs in the preceding year and the collections realized under coast light dues amounted to Rs. 1·76 lakhs as against Rs. 0·78 lakh in 1918–19. The aggregate value of the sea-borne trade on private account at the outports was Rs. 34·61 crores as against Rs. 28·02 crores in the previous year. The port of Tuticorin continued to have the largest trade both in exports and in imports. The number and tonnage of vessels that entered the outports during the year were respectively 18,852 and 2,937,998 tons as against 20,986 and 2,147,621 tons in 1918–19. The total number of

passengers that arrived at and sailed from the various outports increased by nearly two lakhs to 490,408. This large increase was chiefly due to the resumption of the bi-weekly service of the Bombay Steam Navigation Company's steamers on the west coast. The largest traffic continued to be at Dhanushkodi. A sum of Rs. 20·08 lakhs was spent on public works during the year.

General

123. Lieut.-Col. Ducane, a representative of Messrs. Wolfe Barry Lyster and partners, Harbour Experts, London, visited the ports of Cocanada, Negapatam, Tuticorin, Mangalore and Malpé for the investigation of harbour improvement schemes of those ports. The year was marked by a considerable falling off of the country sailing craft tonnage apparently due to the revival of steam tonnage. Dredging operations for the maintenance of boat channels were conducted at Cocanada, Cuddalore, Negapatam and Mangalore. Thirty-one shipping casualties occurred during the year as against 33 in the previous year, of which only one was attended with the loss of life of one person. Coast lights were exhibited throughout the year without interruption in spite of a great deal of sickness among the light-keepers. All the port lights were also exhibited throughout the year. The acetylene automatic unattended light at Gōpālpūr continued to work satisfactorily. The working of the port rules and regulations was satisfactory. The boat supply at the several ports was also up to the requirements. In order to secure greater efficiency in the administration of the minor ports some of the enactments appertaining to the administration of these ports, and the rules framed thereunder were amended. A few of the ports to which certain of these Acts were not applicable so far, were also brought within the scope of these Acts during the year.

MORTALITY FROM WILD ANIMALS AND SNAKES (1919)

[*Report on the mortality caused by wild animals and snakes and the measures adopted for the destruction of wild animals during the year* 1919; *Statistics of British India, Vol. III, Public Health, Deaths from and destruction of wild animals*]

Mortality

124. The number of persons killed by wild animals was 568 and by snakes 1,263 as against 560 and 1,275, respectively, in the previous year. The mortality from wild animals was, as usual, highest in Ganjām and Vizagapatam and, as in previous years, was caused mostly by tigers. More than 100 deaths from snake-bite occurred in each of the districts of Vizagapatam, Tanjore, Trichinopoly, Salem and Malabar. Chingleput, South Arcot and Coimbatore also returned high numbers.

Wild animals

Snakes

Rewards

125. A total sum of Rs. 16,142 was disbursed in rewards for the destruction of wild animals.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

MISCELLANEOUS (1919)

[*Reports on the working of the Indian Arms and Explosives Acts ; Return of sulphur licences in force during the year* 1919]

Arms, explosives and sulphur

126. The total number of licences issued under the Indian Arms Act increased by 3,579 to 51,712. The bulk of the increase (2,051) which was shared by almost all the districts occurred under licences to possess arms for sport, protection or display (35,068). This was apparently due to the change of policy announced by the Government of India in the administration of the Act. Licences for the destruction of wild animals doing injury to crops or cattle (15,342) which have been steadily on the increase from year to year rose during the last quinquennium by nearly 50 per cent. The number of breech-loading weapons licensed increased by 1,730 to 9,300. There was a decrease of 19 in the number of revolvers licensed. The total number of licences under the Indian Explosives Act decreased by a little over 500 to 10,720. The number of prosecutions under the Arms and Explosives Acts and the percentage of conviction were both slightly lower as compared with the previous year. There was a slight decrease in the number of sulphur licences granted, but the quantity for which licences were obtained increased from 464 tons to 554 tons.

CHAPTER IV

PRODUCTION AND DISTRIBUTION

AGRICULTURE (1919–20)

[*Report on the operations of the Department of Agriculture and the Administration Report of the Civil Veterinary Department, Madras Presidency, for the year* 1919–20 (*G.Os. No.* 1853, *Revenue (Special), dated the 22nd October* 1920, *and No.* 2946, *Revenue, dated the 10th December* 1920) ; *Agricultural Statistics of India, Vol. I, British India*]

General

127. In spite of the conclusion of peace, the state of depletion of the superior staff in both the agricultural and scientific branches continued with little or no abatement. One Deputy Director was away in Mesopotamia. Another went on deputation to Cochin-China to study the Cambodia cotton in its natural habitat. The Deputy Director of Agriculture, Live-stock, resigned the service during the year. One additional Assistant Director was appointed and posted to the fourth circle. A Sericultural Expert was entertained for a term of three years with headquarters at Kollegal in the Coimbatore district. The Indian Sugar Committee toured in this Presidency between February and March 1920. The Acting Government Sugarcane Expert toured for six weeks in the various parts of Northern India, studying the behaviour of the seedlings distributed to the different farms. The Professor of Agriculture visited the Agricultural Institutes at Pusa, Nagpur and Poona. No new agricultural station was opened but considerable work was done by way of developing stations already in existence. Much preliminary work was done on the Cambodia station in the Coimbatore district in laying out an area of 40 acres into fields, in levelling them, and in constructing wells and erecting buildings. Similar work was also carried out on the Chintaladevi cattle farm, where the Public Works Department commenced the construction of permanent buildings. Three of the four experimental stations in the planting districts were completed during the year and work was started upon them. The Tenmalai rubber station was in course of construction. The construction of farm buildings was completed on the Gudiyattam Demonstration Farm. A Committee was appointed during the year to consider and report on the means whereby the standard of the diploma and certificate examinations of the Agricultural College could be raised. Its report was submitted to Government in December 1919. The examinations for the diploma course were postponed from December 1919 to February 1920 as the students had spent some time on special duty in a campaign for an increase of food production. A class of ten students appeared for the diploma examination and all passed, two securing first-class diplomas. For the certificate examination 42 appeared and 38 passed. The subject of agricultural middle schools was discussed a good deal in the Legislative Council. One such school was sanctioned during the year at Taliparamba on the West Coast, and proceedings under the Land Acquisition Act were in progress in order to secure a site for the school. To work the institution two diplomates in Agriculture were trained at the Teachers' College, Saidapet. The Farm schools opened for the benefit of juvenile agricultural labourers at Palur, Anakapalle and Coimbatore continued to be maintained on the lines laid down by Government.

Agricultural research and experiments

128. The season was on the whole favourable and a contrast to that of the previous year. The rainfall was above the average in the greater

part of the Presidency. In the Deccan, however, the distribution of the rainfall was somewhat abnormal and the crops were below the average.

Sugarcane

Co.I, a seedling cane from the Sugarcane Breeding Station, proved to be the best of the varieties grown on the Central Farm both in point of yield and in the excellence of its jaggery; an additional point in its favour was that it received no attention from jackals. All the Barbadoes varieties tried at Taliparamba gave excellent jaggery. Comparative trials of fish guano and castor cake as manure for sugarcane were instituted at Samalkota but yielded no conclusive results.

Paddy

The department's knowledge of the varieties of paddy being by no means commensurate with its importance, the study of that cereal was continued. In the varietal tests at Coimbatore, Poombalai yielded better than sadai samba. The Government Economic Botanist's Nos. 24 and 1303 were grown on a larger scale and yielded very well, the latter better than the former. Puttu (glutinous) paddy was introduced for the first time and grew well. Manurial experiments were continued at Coimbatore and Manganallur. Bonemeal and Trichinopoly phosphate were both compared with superphosphate. The experiments showed that both bonemeal and Trichinopoly phosphate had a slightly less effect than superphosphate in the first year, that there was very little difference in the yields in the second year and that it is advantageous to supplement oil cakes in this way with phosphatic manures. It was also found that the less concentrated manures like basic slag and basic phosphates showed more manurial residue than the corresponding concentrated manures. Composting experiments at Manganallur yielded successful results. Nitrogen applied in the form of ammonium sulphate was also found to

Cotton

be of greater value than that supplied as Nitrolin. Work on cotton continued on the same lines as in previous years. At Hagari, H. 25 was found to be an even better yielder than No. 14 which was favourably reported on by the Indian Cotton Committee. Varietal tests at Coimbatore included Cambodia, Saigon, Uppam and Karunganni. Cambodia No. 11 came out best, Saigon coming next. The fineness of the Saigon cotton lint was favourably reported on by Messrs. Stanes & Co. The cotton rotation experiments at Nandyal were brought to an end as the

Dry grains

results were considered satisfactorily established. Experiments in the irrigation of sorghum and ragi were continued. The rotation experiments with sorghum at Coimbatore showed that a leguminous crop entering into rotation exercised considerable influence on the yield of the

Fodder crops and grasses

subsequent cereal crop. At Coimbatore the use of estate sullage for irrigating fodder crops was continued, guinea grass being one of the best crops for the disposal of sullage. Elephant and Soudan grasses were also tried at that station. Guinea grass was tried at Palur, Gudiyattam and Samalkota. Teff grass, an emergency food and fodder crop, continued to be cultivated at Palur. Fodder cholam was as usual raised at the Central Farm, Coimbatore. Considerable progress was made in the study of the

Coconut

coconut. An interesting series of soil moisture determinations were made, showing the value of cultivation in conserving soil moisture, the rate of penetration of rain water under different conditions in the same kind of soil and also the way a crop of coconuts affects the moisture content of the

Potato

soil. Five tons of Australian seed potatoes were planted on the potato farm at Nanjanad in the Ootacamund taluk. Fish manure was tried

Miscellaneous crops

and found very effective in promoting the growth of potatoes. In the groundnut varietal tests at Palur, local Mauritius yielded best. The yield of pepper at Taliparamba was better than normal though inferior to that of the previous year. Manurial experiments showed that fish manure, leaf mould, lime and soil-mulch were beneficial to pepper. Henbane did not thrive well at Kovilpatti owing to rains in

Live-stock

January. Arrangements were made with the authorities of the Military Dairy farm at Bangalore for conducting breeding and feeding experiments with cross bred cattle. Four Ayrshire bulls were imported for the improvement of the Madras dairy trade. They arrived in February

1920 and were stationed temporarily in the Government House stables at Guindy. The College Dairy at Coimbatore was less of a commercial success than in previous years owing to the great increase in the cost of all dairy produce. The rearing of selected young buffaloes for breeding at Samalkota was continued. Frequent attacks of pneumonia played havoc among the sheep on the Bantanahal farm. The number of eggs collected in the poultry farm at Coimbatore was over double that of the previous year. Six medals were won by the poultry at the Ootacamund show. Fresh strains were obtained by purchase from the Principal, Veterinary College, Madras.

Scientific research and experiments

129. There was a further increase of routine work in the Chemical section, the number of samples analysed being 642 as against 485 in the previous year. The analytical work of the United Planters' Association, Southern India, was carried out in the Government Agricultural Chemist's Laboratory. The chemical survey of the soils of the Gōdāvari delta was completed ; it was found that there was a deficiency of nitrogen in 40 per cent of the soils and of phosphoric acid in about 25 per cent indicating that manures, such as fish guano, rich both in nitrogen and in phosphoric acid should give good results. Composting experiments with mineral phosphate and green manures were conducted both in the laboratory and in the field. An investigation was commenced of the chemical changes taking place in the germination of the coconut. The Economic Botanist practically confined his attention to discovering and propagating better yielding strains of paddy. The Government Entomologist initiated experiments to control *Schoenobius bipunctifer* in the Kistna district and organized a campaign against *Spodoptera mauritia*, the swarming caterpillar, in the Malabar district. A scheme for opening Sericultural farms at Kollegal, Coonoor and elsewhere was submitted to Government but held over for want of funds. The Sericultural Expert was engaged meanwhile in demonstrating improved methods of sericulture in and near Kollegal. The palm disease operations in the Kistna and Gōdāvari districts claimed a leading share in the attention of the Mycologist. The blast of paddy, *Piricularia oryzæ*, was under observation in Coimbatore, Malabar, North Arcot, Chittoor and Tanjore districts. Similar diseases were found on ragi, tenai and wheat. The spraying of grape vines against mildew was taken up in Michaelpatti in Madura district and carried out with remarkable success. The bleeding disease of coconut was operated on in certain places and the trees were subsequently found to be free from the disease. The season was more propitious than that of the previous year for flowering canes. Breeding was confined to ascertained parents known to give rise to seedlings of the right kind.

Economic botany

Entomology

Sericulture

Mycology

Sugarcane breeding station

Aid to the public

130. The department continued to advise and help the special staff engaged in the operations against palm disease in the Kistna and Gōdāvari districts. A Special Deputy Collector took charge of the special staff in October 1919 and was employed in advertising the Pest Act and in propagandist work. The enforcement of the Act commenced in April 1920. It was applied to Cambodia cotton in the Coimbatore district with a view to minimise the damage caused by the insect pests, the stem weevil and the pink boll-worm. The measure fully justified itself as the subsequent crop was remarkably free from damage by the boll-worm. It was also enforced in respect of the water hyacinth in the taluks of Surada and Berhampur in the Ganjām district, in the municipalities of Vizianagram and Cuddalore and in the villages of Malabar, south of the Ponnani river. The Mahali disease on arecanut was less virulent than usual and only 6,000 trees were sprayed during the year. A note on the symptoms and control methods of the disease was published and distributed broadcast in the affected area. The operations against smut or Sorghum in the Ceded districts were restricted owing to paucity of staff and seed sufficient for an area of 32,278 acres only was treated with copper sulphate. Some 303,195 cane setts were sold to ryots. Many ryots in the South Arcot district learned to grow cane 3½ to 4 feet apart in trenches, lessening the seed rate from

Operations against disease

Crops

20,000 to 15,000 per acre. Improved sugarcane furnaces were constructed in the principal sugarcane areas. The process of manufacturing jaggery was taught to several ryots in the South Arcot district and the method of making brown sugar was demonstrated at Kampli in the Bellary district. Sugarcane cultivation continued to spread in South Kanara ; the fall in the price of iron enabled a number of large pans to be purchased by cane growers in that district. With the rapid extension of Company cotton in the southern districts, the work of seed unions became increasingly difficult, and only a third of the expected quantity of seed was supplied by them. A system of paying a bonus of Rs. 3 on every *pothi* of 250 lb. was introduced, and a sum of about Rs. 2,000 was distributed to the seed unions. Over 185,000 lb. of selected paddy seed were sold from Government farms. The most successful work was in regard to manures. Green manure, fish guano, fish manure, bonemeal and phosphate, all received rapid attention according to the needs of each tract, as disclosed by soil analyses, and in the case of the last two manures, experience demonstrated the urgent need for bringing them more within reach of ryots both as regards accessibility and as regards prices. The use of fish guano and fish manure was also pushed vigorously, 1,357 tons of fish guano and 104 tons of sardines having been purchased on the West Coast and distributed throughout the Presidency. A special manure mixture was introduced into Tanjore district and 227 tons of this were sold to ryots in Tanjore and Madura.

Agricultural machinery

131. Four motor tractors were in use in the department. One was tried on the Bantanahal Sheep Farm, one, a Cleveland, was tried on the Guindy racecourse and subsequently lent for trial at the Kavali Criminal Settlement, Nellore district, one (Fordson) was in use on the Kovilpatti Farm and the fourth (also a Fordson) was in use on the Coimbatore Central Farm.

Agricultural associations, shows and fairs

132. The Eleventh Pony and Cattle Show was held at Tiruppur in June 1919. Agricultural exhibitions were held at Madurantakam (Chingleput district) in November 1919 and at Tiruvannāmalai (North Arcot district) in December 1919 during the Kartigai festival. A conference between the Co-operative and Agricultural Departments was held at Coimbatore in December 1919 at which it was resolved to issue the Agricultural Calendar in future with the joint collaboration of the Agricultural, Co-operative and Veterinary Departments, to promote the joint sale of agricultural produce and to collaborate for the organization of societies for preparing agricultural produce for the market. Co-operative societies rendered good service in the distribution to members of fish guano from the West Coast. Other societies co-operated with the department in the demonstration of improved implements, joint purchase of cattle food, seed and manure and in the cultivation of sugarcane according to improved methods.

Agricultural engineering

133. In the Agricultural Engineering section, progress was hampered by the continued difficulty experienced by ryots in procuring capital and machinery. Eighteen plants were completed during the year, twelve of which were erected with second-hand machinery. There was a satisfactory increase in the number of applications for advice under pumping and boring. The Sugarcane Factory at Chittavadigai in the Bellary district was closed during the year and the factory at Pallapalaiyam in the Coimbatore district continued to do satisfactory work.

Finance

134. The receipts and expenditure of the department rose respectively from Rs. 2·2 lakhs and Rs. 10·1 lakhs to Rs. 3·3 lakhs and Rs. 13·2 lakhs.

Civil Veterinary Department

135. The administrative and executive staff of the Civil Veterinary Department remained the same as in the previous year, except that the number of Inspectors decreased from 16 to 15 and that of assistants from 124 to 121. No new graduates were entertained in the year. The Inspector who had been on military duty in Mesopotamia reverted to the department in the course of the year. The total number of students on the rolls of the Veterinary College in March 1920 was 88. Thirty-one

Madras Veterinary College

students appeared for the final examination and 19 graduated giving a percentage of 61·2 as against 73·0 in the previous year. The Superintendent of the Civil Veterinary Department was in charge of the office of the Principal of the Veterinary College in addition to his own duties during the latter's absence on furlough. Seven new hospitals and dispensaries were opened during the year at stations along the borders of the Hyderabad State. In addition a private hospital was opened at Virakeralampudur in the Uttumalai estate in November 1919. At the close of the year there were 50 veterinary institutions excluding the Madras Veterinary College hospital and the hospital attached to the Coimbatore Agricultural Farm as against 42 in the previous year. In 13 institutions a fall in the number of admissions occurred. The introduction of fees was the chief cause of the decline in five of them and in others it was due to the prevalence of rinderpest, scarcity of fodder, and the replacement of animal-drawn carriages by motor cars. The total number of castrations performed at veterinary institutions rose from 1,990 to 2,246. There was a satisfactory decrease from 76,114 to 59,297 in cattle mortality from contagious diseases, of which rinderpest accounted for 31,237 as against 44,164 in the previous year. The disease continued to be severe in much the same parts of the Presidency as in the previous year and additional Veterinary Assistants were deputed to those areas to arrest its spread. During the year a beginning was made with serum simultaneous inoculations against rinderpest. Sixty-nine animals belonging to the Government Agricultural Farm at Coimbatore were subjected to the process with no fatalities and it is believed that all these now enjoy permanent immunity from the disease. There was a further decline in the number of deaths from *hæmorrhagic septicæmia*, *black-quarter* and foot and mouth disease, but anthrax claimed 3,817 victims or 104 more than in the previous year. A heavy mortality amongst the sheep and lambs of the Agricultural Farms at Hagari and Bantanahal in Bellary district occurred during the year and many of the cases showed pneumonic lesions. Village officers were more slack than usual in reporting outbreaks of contagious disease among cattle. The cattle and pony show at Tiruppur was held in June 1919 and two gold medals were awarded by Government for the best bull and the best cow in the shows. Owing to the continued prevalence of rinderpest in some districts many of the annual and weekly cattle-fairs were ordered to be closed. A leaflet on " Rinderpest " was distributed during the year by the Publicity Bureau. Four numbers of the *Madras Veterinary Journal* were issued during the year. The enormous increase in the amount of work appertaining to the department necessitated the creation of two more posts of Superintendents borne on the Imperial cadre : and the Government are considering proposals for the appointment of a Director to take charge of the whole of the veterinary work in the Presidency.

Hospitals and dispensaries

Diseases

Miscellaneous

WEATHER AND CROPS

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Season and Crop Report for fasli* 1329 ; *Agricultural Statistics of India ; Estimates of Area and Yield of certain principal Crops in India*]

136. The south-west monsoon burst early in June with heavy rains on the West Coast and fairly good showers in the Circars, Deccan, the Hills and in parts of the Carnatic, the South and the Central group of districts and gave a good start to the sowings of early crops. The rainfall up to the end of July was copious and well distributed and it exceeded the average in all the districts except Guntūr, Madura, Tinnevelly, the West Coast and the Hills. The rains during August and the early part of September, however, proved disappointing, particularly in the Deccan, Gōdāvari, Guntūr, Chittoor and Salem, and considerable anxiety was

Rainfall

felt, but the sudden and copious rains in the latter half of September changed the situation. On the whole, the total rainfall during the period, June to September, exceeded the average everywhere except in Vizagapatam, Kistna, Guntūr, Nellore, South Arcot, Tanjore, the West Coast and the Hills. The effect of the timely and well distributed rains in the early part of the season was reflected in the expansion of the area under cultivation as compared with the average of the previous five years. There were, however, slight decreases under first crop dry in parts of the South, the Deccan, and the Carnatic and under first crop wet on the West Coast. The north-east monsoon commenced as usual early in October and though the fall in that month was below the average in many districts, the deficiency was made good by the copious fall in November. In Kistna, in particular, the fall was exceptionally heavy and the low-lying lands in the Kollēru side villages were inundated and the paddy crop damaged. The first fortnight of December witnessed fairly good showers in all the tracts except the Circars and the Deccan ; while during the third week there were light showers in all the districts. Thereafter a break in the monsoon ensued but about the close of December and the beginning of January there were heavy rains which affected the harvests in Bellary, Chittoor, Salem, Trichinopoly and in parts of Madura and Rāmnād. The total rainfall during the period October to December exceeded the average almost throughout the Presidency. The heavy rain in the first week of January was followed by a spell of fine weather which lasted with slight interruptions to the end of March when it changed bringing fair or light showers which continued with varying strength to the end of May.

Crops

137. The season was on the whole favourable from an agricultural point of view. Relief operations under the Famine Code were continued in the districts of Kistna and Ganjām. In Kistna the distress was slight and was confined to a portion of one taluk and relief did not pass the stage of test ; the test works were closed by September on the commencement of the harvesting of cumbu and green gram. In Ganjām where the distress was severe and covered an area of more than a thousand square miles, the regular famine works opened about the end of the previous fasli had to be expanded and by the 11th of October the daily numbers relieved rose to over 150,000. From that date there was a gradual fall and with the commencement of harvests in the middle of November, the numbers relieved fell below 100,000 and works were eventually closed in December. For want of timely rains and on account of the insufficient supply of delta water in parts of Gōdāvari and as a result of the submersion of the paddy crops in the Kaikalur taluk of the Kistna district, seasonal remissions on a somewhat large scale had to be granted. The postponement of the collection of kists beyond the fasli was, however, not found necessary anywhere. The area under cultivation in the Presidency fell short of the normal by 3·5 per cent. The extents under paddy, cholam, gingelly, cotton and tobacco showed an increase and those under cumbu, ragi, groundnut, castors, sugarcane and indigo a decrease. The outturn was generally below the normal.

HORTICULTURE (1919-20)

[*G.O. No.* 1365, *Revenue (Special), dated the 26th July* 1920; *Report of the Agri-Horticultural Society of Madras for* 1919-20; *and G.O. No.* 2722, *Revenue, dated the* 13*th November* 1920]

Government Botanic Gardens and Parks, the Nilgiris

138. The season and rainfall were favourable in all the gardens. At Ootacamund the rainfall was 17 inches more than in the previous year and there was therefore no serious shortage of water during the dry months. Frosts were not severe and did little damage to plant life. At Burliar and Kullar the rainfall was less than in the previous year but no serious drought occurred. The general condition of the Botanic Gardens at Ootacamund compared favourably with that of the preceding year and the flower beds showed a distinct improvement. The nursery glass houses were maintained in their usual order and the propagation of plants for furnishing the conservatories was satisfactorily carried out. The results obtained from the growing of medicinal plants were disappointing. A great deal of improvement was effected during the year in the Government House gardens. At Sim's Park, Coonoor, the work of improving the turf was continued and several new trees and shrubs were planted. In the orchard the varieties of Japanese plums, "Wrights date," "Satsuma" and "Kelsey" fruited well, especially the last which bore an excellent crop of fruit. The grafting of different varieties of plums on to peach stocks was being carried out as fast as stocks became available. Tomatoes raised from English seeds were fruiting very well and all the fruits were being used for seed purposes for distribution to the local ryots to replace their own much deteriorated varieties. With a similar object six hundred plants of *Physalis peruviana* (Cape gooseberry), a much appreciated preserve fruit, were planted during the year. Thirty plants of a species of guava which makes excellent jam were raised from suckers and six plants of another species from seeds received from the Ministry of Agriculture, Egypt. At the Burliar experimental garden the fruit trees were all thriving. The pine apples fruited but a great deal of damage was done to them by wild pigs. The mangosteen crop was a failure. At the Kullar experimental garden the orange plantation has been unsatisfactory of late and experiments were tried to induce the trees to bear fruit. A number of Para rubber trees were cut down and the land was replanted with grafted mangoes, limes, Avacado pears, citrons and plantains: and a large number of seedling oranges, guavas, mangoes and custard apples were raised and placed in pots for grafting purposes. The plants of *Acras Sapota* (Sapodilla plum) fruited freely. At Benhope the coffee plants were growing fairly well. The Gardens and Parks on the Nilgiris will in future be under the Agricultural Department.

The Agri-Horticultural Society, Madras (1919-20)

139. In the Agri-Horticultural Society's garden at Madras there was no rain from February to May. Much pipe water had to be taken in April and May as the water in the Society's wells was low. As usual, several thousands of seedlings of annuals were raised and distributed among members and sold to non-members. The *Rosarium* in the Nursery Gardens was maintained in good condition, but the rose bushes have been exhausted by keeping them continually in flower and will have to be replaced. Many of the fruit trees were growing fairly, but had not come into fruit. The income of the Society from all sources excluding the Government grants was Rs. 14,629 or Rs. 1,231 more than that realized during the previous year. The Government grants amounted to Rs. 7,000. The expenditure was Rs. 19,794, and the year closed with a balance of Rs. 2,817 against an opening balance of Rs. 982. The eighty-first annual exhibition of flowers, vegetables and fruit was held in the Nursery Gardens of the Society on the 28th February 1920. In conjunction with it, the third All-India Poultry Show was also held. The former was a success and the general opinion with regard to the latter was that it was good right through and that the grounds, staging and penning and all arrangements were such as to command universal satisfaction.

Government cinchona plantations

140. On the Naduvattam plantation the rainfall registered was 95·38 inches against an average of about 100 inches, at Hooker 90·26 inches were registered, while the fall at Dodabetta was 61·48 inches. The total area under cultivation at the end of the year was 1,590 acres as against 1,348 acres at its beginning, the increase occurring entirely in the Naduvattam plantation. Considerable difficulty was experienced in keeping the labour force up to full strength because of the competitive claims of large undertakings near the recruiting centres. The scheme of reafforestation referred to in the previous year was continued, but the result was not up to expectations as many of the plants died out on account of an untimely drought. The planting of forest trees on the grass hills was continued. Owing to difficulties in the provision of a

Quinine factory

temporary structure till the restoration of the Quinine factory which was destroyed by fire in the previous year work was done only for six months during the year. The quantity of bark worked up was 425,022 lb. of an average analysis of 4·28 per cent as against 3·66 per cent in the previous year. From this 17,318 lb. of quinine sulphate were obtained showing a factory efficiency of about 95 per cent as against 91 per cent in the previous year. As only purchased bark was employed, there was an increase of Rs. 3·8 per lb. in the cost of quinine in bark form. The cost of extraction was Rs. 4·7 per lb. of quinine as against Rs. 4·9 in the previous year. In all 29,786 lb. of factory products were sold during the

Finance

year. The receipts for the year were Rs. 10·92 lakhs and the expenditure Rs. 5·09 lakhs. Negotiations were still in progress during the year regarding the amalgamation of the Madras Cinchona Department with that of the Cinchona Department of Bengal under the central control of the Government of India. The close of the year marked the disassociation from the department of the pice packet system. These packets of 10 grains of quinine sulphate will in future be prepared and distributed by the Superintendent of the Penitentiary, Madras. During the thirty years that have elapsed since the system was inaugurated, countless millions of packets have been disposed of at a popular price, thus bringing the only established cure for malaria within reach of the poorest classes.

FISHERIES

(1ST JULY 1919 TO 30TH JUNE 1920)

[*Report of the Fisheries Department for* 1919–20; *G.O. No.* 2278, *Revenue* (*Special*), *dated the* 23*rd December* 1920]

General

141. Sir Frederick Nicholson, to whose disinterested labours extending over a period of nearly fifteen years the Department of Fisheries entirely owes its success, continued in charge of the West Coast stations until the 1st February 1920, when he finally severed his official connexion with the department, but he was still assisting the department with advice and by the writing of bulletins on special subjects connected with fisheries. The designations of the officers comprising the technical staff were altered during the year so as to indicate generally the different spheres of their work. There are now three Assistant Directors, one in charge of the marine section who is mainly concerned with sea fisheries including the pearl and chank fisheries and the maintenance of the fish farm at Tuticorin, another in charge of the inland section who deals with problems regarding fresh-water fish, including the breeding and distribution of larvicidal fish in connexion with anti-malarial operations and a third in charge of the coast section who deals generally with fish after it is landed (fish-curing, the manufacture of fish-oil and guano and measures to be adopted for marketing the fish). The last also deals with fishermen, and especially carries on socio-economic, temperance and educational work amongst them. The Marine Biologist is concerned with the identification of marine fauna and the supply of marine biological specimens to educational institutions and museums. In July 1919 the Government appointed a committee to consider the question of constructing a

steam-trawler which could be used for the purposes of pioneering steam-trawling, for visits to the Laccadives and for the inspection of light-houses and ports. The committee's report was under the consideration of Government during the year. Proposals for the establishment of a fisheries college were also under consideration.

Coast section

142. At Tanur the season was poor as regards the supply of the larger kinds of fish, but sardines were plentiful for several weeks and prawns were available in fairly large quantities ; no mackerels were available at all. Altogether 127,476 lb. of fish were cured and sold. In the oil and guano operations 260 tons of sardines were treated and yielded 585 gallons of oil and 44½ tons of guano. An experiment in the sharp freezing and chilling of fish was tried, but it was not a commercial success. Samples of fish oil were sent to the Indian Institute of Science, Bangalore, for experiments with a view to find out the simplest and the least expensive methods of reducing their acidity. As inquiries were made for fish meal for feeding cattle, pigs and dogs, experiments were made in its preparation and the samples prepared were favourably reported on as regards their quality. The oil and guano industry continued to make rapid progress. The number of private factories increased from 358 to 563 and 24,000 tons of guano were manufactured during the season. The value of oil manufactured was about Rs. 3·75 lakhs. Adulteration of guano with sand or mud has become an almost universal practice and the remedy for this must for the present be in the hands of buyers. During the year 24,557 gallons of various grades of fish oil were purchased and supplied to the Board of Munitions. In the seven fish-curing yards on the West Coast taken over from the Salt Department 204,117 maunds of salt fish were cured during the year.

Inland fisheries

143. Fresh-water pisciculture was being extended district by district. At Sunkesula carp and *etroplus* were bred in the farm and distributed to the Cuddapah-Kurnool canal and to the selected tanks in the Ceded districts. In the fish market at Kurnool, 509 lb. of murrel and 1,826 lb. of carp reared in the Sunkesula farm were sold. The *etroplus* introduced last year into the farm at Ippur in Nellore district bred on a large scale and it was possible for the first time to distribute the fry of this non-indigenous fish to the tanks served by this farm. The tanks were also supplied with mullets. About 12,600 larvicidal fish were supplied to local boards and private persons. The general work of the powder factory farm at Madras was satisfactory and about 800 *etroplus* and 700 mullets were distributed from the farm to the twelve tanks in the Presidency. The new larvicidal fish-farm at Praema in Kurnool district was brought into working during the year. Gourami bred twice in Sunkesula and in the ponds of the powder factory, Perambur. *Etroplus suratensis* also bred prolifically in the artificial nests designed for them at both these places ; they bred for the first time at Ippur. It will now be possible to distribute to fresh-water lakes and tanks this valuable estuarine food-fish which is usually confined to tidal waters along the coast. The tench and English carp under observation in Sunkesula continued to do well but had not yet bred. A large stock of fry of *mugil troscheli* and other allied mullets were transferred to tanks and reports on water stocked last year and fished this hot weather show that success attended these experiments. Mullet fry ranging in size from 2 inches to 5½ inches have grown to 9 inches and 11 inches within a period of ten months in the Ippur fish farm. One of the largest of the indigenous carp is *catla catla*, which is very numerous in the Kistna, the Gōdāvari and rivers further north and is regarded as one of the valuable food fishes of these rivers. Half a century ago it was unknown in waters south of the Kistna. Since the opening of the Cuddapah-Kurnool canal and the stocking of that canal by the Fisheries department with this species, this fish has found its way into the Pennar river and is now very common in tanks fed by the Pennar in Nellore district where it is known as Kistna botcha or Kistna carp. Last year a consignment of this carp was introduced into the Madurāntakam tank and it is proposed to extend this fish further south.

A preliminary survey of the streams and lakes in the Kodaikānal plateau to determine their suitability for trout was undertaken during the year.

Marine work

144. The returns from the chank fisheries were not as satisfactory as in the previous season. The labour problems presented difficulties and the weather was more unfavourable. The divers of Tuticorin with the assistance of local capitalists who wished to employ them at the Ceylon chank fishery in February struck work in October, and demanded increased rates of payment for chank. The demands were refused and divers were brought from Kīlakarai. The total catch of Tinnevelly fisheries amounted to 158,941 full-sized chanks as against 148,285 in the previous year. In the Rāmnād chank fishery the season was poor, the total shells taken being 180,894 as against 286,977 in the previous year. The poor results were also due to the shortage of the labour supply, as the Kīlakarai merchants took all the available divers to Ceylon to work in the chank fishery there. The maximum number of divers who worked in the fishery was 200 as against 400 in the previous year. No expedition was sent to Ceylon during the year.

Fishing experiments

145. The bêche-de-mer fishery which was carried on at Tirupalakudi in Rāmnād district resulted in 6,245½ lb. of a cured product as against 3,038 lb. in the previous year. The Tholayiram and Athombathu bars were inspected in February. The former is the largest pearl bank in Tinnevelly district. There were a few young oysters of 2″ diameter on the average, their age being approximately two years. Those taken were found to be healthy, but there were no pearls in those opened. The Marine Biologist carried on work in Tuticorin where accommodation for his office and laboratory has been rented. Specimens of fishes were identified and kept as a beginning of a type-collection. The difficult question of ascertaining the species of mullet found at Tuticorin was taken up and much work was accomplished. The work of supplying Zoological specimen to educational institutions was extending rapidly. Specimens were supplied not only to colleges in all parts of India but also to the University of Aberdeen. The number of visitors to the Marine Aquarium was 163,517 as against 96,957 in the previous year. The attendance and the admission money collected were far in excess of the figures in any previous year and the institution has been much more highly appreciated by the public and of more use for educational purposes than before. A certain amount of research work is carried on in the aquarium. Detailed notes on the habits of fishes, crustaceans, etc., are recorded as well as data regarding the rate of growth, the spawning seasons and other matters. The systematic identification of crabs at Madras and at Tuticorin has been undertaken. The causes of the death of fish in captivity were under investigation. In the Pulicat Oyster Park the season was affected by rain which reduced the salinity of the water in the lake and only 133,450 oysters were supplied as against 404,850 in the previous year. Experiments to determine the biological conditions conducive to the healthy life of oysters were made in the aquarium, and others to ascertain the period of spatfall, the rate of growth, etc., were in progress at Pulicat.

Socio-economic work

146. The number of fishermen's co-operative societies rose from 31 to 47, the membership from 1,900 to 2,827 and the number of shares and the paid-up share capital from 2,438 and Rs. 25,388 to 3,832 and Rs. 49,232 respectively. The loans disbursed amounted to Rs. 1,17,520 as against Rs. 40,511 in the previous year. The societies have on the whole worked satisfactorily, if due allowance is made for the inexperience and illiteracy of the great majority of the members. The movement was spreading itself to the fresh-water fishermen of the Cauvery river and the large communities of Oriya fishermen in Ganjām. The Government fisheries training institute was opened in July 1919 at Calicut with the object of training men to teach in elementary schools for fisherfolk. Arrangements were also made to familiarise the pupil teachers with technical work carried in the fisheries stations at Tanur and Chaliyam. At the beginning of the year the Government sanctioned the opening of eight elementary

schools for fisherfolk on the West Coast. At the end of the year ten day and ten night schools were maintained on the West Coast by the department. In some cases the schools were started by the villagers themselves and handed over to the department after they had worked them two or three months and proved the need for such schools in their villages. Temperance work and propaganda continued to be carried on amongst the fisherfolk with much success.

FORESTS

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Annual Administration Report of the Forest Department of the Madras Presidency for the year ending the 30th June 1920; Statistics of British India, Vol. II, Financial Statistics, Part II, Forests*]

Area

147. The area of reserved forests rose by 82 square miles to 18,794 square miles, while the extent of reserved lands fell by 117 square miles to 565 square miles. The important changes were that an extent of about 140 square miles of reserves, chiefly in Upper Gōdāvari division, Salem North division, the Nilgiris and Cuddapah divisions, were finally settled under the Forest Act. About 57 square miles, chiefly in Bellary division, Guntūr division, North Vellore and Tinnevelly divisions, and South Arcot division, were disafforested and assigned for cultivation and there was a reduction of about 3 square miles in Vizagapatam owing to the rectification of areas. As for reserved lands, about 19 square miles were notified under section 4 in South Salem division, and 5 square miles were added by the rectification of area in Lower Gōdāvari division. Forest settlement work was as usual carried on by Revenue Divisional Officers. Out of a total area of about 577 square miles awaiting settlement at the close of the year, the Northern Circle alone contributed an area of nearly 400 square miles. In the Southern Circle about 61 square miles of hill forests in the two Salem divisions remain to be finally settled. In the Western Circle the Mudumalai forests were taken up for settlement during the year. The Deputy Collector appointed for the selection of blocks for final reservation in the Attūr taluk was on special duty throughout the year and his term has been extended up to 5th December 1920. About 86 square miles of forest boundaries were newly demarcated during the year chiefly in the divisions of Kurnool East, Trichinopoly, Madura, Kollegal and North Coimbatore. At the close of the year 484 miles remained to be demarcated chiefly in the districts of Trichinopoly, South Mangalore, Kollegal and North Coimbatore. The length of old boundaries repaired during the year was 20,431 miles against 17,368 miles in the previous year, of which 11,127 miles were cleared by Forest subordinates in the Northern, Central and Western Circles. The Survey of India Party continued its operations in the Tinnevelly district and surveyed about 2·9 square miles on the 2-inch scale. Working plans covering an area of 73 square miles were sanctioned during the year against 191 square miles in the previous year. The total area under working plans sanctioned by the Board of Revenue and the Chief Conservator up to the end of the year was 8,309 square miles. Working plans covering an area of 1,784 square miles were under preparation by District Forest Officers and a working plan for the Ganjām Sal Forests was completed during the year. Revision of temporary working plans in several districts was carried out by District Forest Officers under the advice of the Conservators of Forests concerned.

Forest settlement

Demarcation

Survey

Working plans

Communications and buildings

148. The outlay on roads and bridges increased from Rs. 1·47 lakhs to Rs. 2·39 lakhs and that on buildings from Rs. 1·34 lakhs to Rs. 1·55 lakhs. Twenty-two miles of road works on the Javadis in the North Arcot district were under construction by the Forest Engineer at a total cost of Rs. 0·89 lakh. In the Central Coimbatore division the construction of the Dhoni-Olavakode road was begun in connexion with the exploitation of the Chenat Nayar forest. The proposal for the construction of a steam

tramway in the Tekkadi forests was abandoned in favour of a scheme of a metalled road. The Forest Engineer has since carried out the investigation of the road work, but no actual construction has yet begun. Plans and estimates are under preparation by District Forest Officers for roads and buildings on the Nallamalais. The bullock tramway in the South Coimbatore division was utilized during the year, but owing to the bad state of the line and the prevalence of disease among cattle its usefulness was limited. It is at present the only means of communication between the coupes worked and the plains.

Protection of forests

Offences

149. The total new cases of the year increased by about 1,380 to 27,537, and this increase is ascribed to the recent strengthening of the protective establishments. Unauthorized felling as usual formed the largest head of forest crime in all the circles and was 67 per cent of the total number of offences. Unauthorized grazing cases also increased in all the circles except the Northern. Of 25,623 cases disposed of during the year (including cases of the previous year) 7,554 cases were dealt with by Magistrates, 16,577 cases were compounded and 1,492 were withdrawn. Of the cases disposed of by Magistrates 6,962 ended in conviction and 592 in acquittal. The amount of compensation fees realized during the year was Rs. 2·05 lakhs which works out to Rs. 12-5-10 per case as against Rs. 10-12-3 in the previous year. The percentage of failure in the cases brought to trial was 8·50 against 7·50. The fact that conviction was obtained in the majority of cases is satisfactory. The

Fire protection

system of fire protection adopted in most districts continued to be the same as in the previous year except in portions of the Nallamalais in Kurnool where the system of early burning was introduced. This was found to be satisfactory. Out of 277 square miles treated in this way only a negligible area of 428 acres was again burnt. This system is reported to have proved useful in preventing the further destruction of the valuable Nallamalai teak plantations which were subject to wholesale fires in previous years. The total area over which special protection was attempted was 6,386 square miles against 7,207 square miles in the previous year, of which 786 square miles were burnt, the percentage of failure rising from 7·4 to 12·3. Fires were particularly disastrous in portions of Kurnool, Cuddapah, North Malabar and the Nilgiris. The co-operation of the hill tribes was as usual enlisted in protecting the forests from fire. The Chenchus were again responsible for a large number of fires in Kurnool. The Koyas and Reddis in the Upper Gōdāvari division, on the other hand, assisted the department in various ways. In Vizagapatam, the blame is laid at the door of the lower subordinate staff who were not tactful in their dealings with the hill tribe. The Malayalees of the Chitteri forests of South Salem and of the Javadi hills of South Vellore discharged their obligations satisfactorily in protecting the forests. In addition to the area specially protected, ordinary protection was extended over 8,727 square miles all of which except 264 square miles were successfully protected.

Grazing

Nineteen per cent of the total area of forests in the Presidency were closed to grazing either wholly or for part of the year as against 25 per cent in the previous year. To the open area of nearly 15,000 square miles permits were issued for the grazing of 2,045,678 animals against 2,117,523 in the previous year, yielding an incidence of 4·69 acres per animal against 4·25 acres in the previous year. The figure of average incidence however can only be considered as a rough guide, as the area quoted as open to grazing contains forests in which there is normally no grazing. The actual incidence in some forests was still extremely high. The policy of gradually raising grazing fees with a view to reduce excessive grazing was continued during the year. The rates of grazing fees were enhanced in Kurnool, South Arcot, Madura, North Salem and parts of Vizagapatam. The grazing revenue realized during the year was Rs. 8·53 lakhs, which is the highest on record for the past ten years. The Nellore kancha system was extended to parts of the Chingleput district and in other districts attempts were made to persuade the villagers to keep their cattle from the grazing blocks until the grass had time to grow

150. To the area of 83,957 acres under sylvicultural treatment 13,809 acres were added during the year. Perhaps the most interesting feature of the year's work was the increased propagation of sandalwood in many forests of the Presidency. It has now been successfully established in the forests of the Upper Gōdāvari division, in some of the evergreen forests of the Lower Gōdāvari division, in Kistna and in Cuddapah; and it is being widely spread in other districts where previous sowings have proved successful. Similar work has also been carried out with the Red Sanders (*Pterocarpus santalinus*) which is found to yield excellent timber in localities so widely different from its native habitat as the coast line of the Northern Circars. Taungya cultivation, a system adapted particularly to hill forests, also received more attention. The old methods of regenerating timber forests based on European practice are rapidly giving place to new. **Sylviculture**

151. There was an increase of 7,000 tons in the output of timber as compared with the previous year. Specimens of important Madras timbers were sent to the British Empire Timber Exhibition held in London during July 1920. The output of fuel rose to 549,700 tons, the highest figure on record except in 1917–18, the increase being due to special efforts made by the department to cope with the shortage of supplies. Coupes in arrears of felling were sold and in some urgent cases, coupes were felled in advance of the time prescribed in the working plans. In spite of a steady increase in the supply of fuel, the complaint still remains that the supply is inadequate. There is no doubt that a serious shortage of fuel is felt in the neighbourhood of some big towns which it is beyond the power of the department to remove. The destruction of waste land and private forests and the want of enterprise of private land-owners are all important factors in the shortage. In the auction sales held at Satyamangalam in November 1919, 217 tons of sandalwood were sold for Rs. 3·22 lakhs while in the sales held at Tiruppattūr and Vellore in December following 280 tons were sold for Rs. 3·94 lakhs. The total average price per ton obtained was Rs. 1,439 against Rs. 1,349 in the preceding year. Bamboos are becoming more and more an important source of revenue. During the year the value of bamboos sold was Rs. 3·14 lakhs against Rs. 3·16 lakhs in the previous year. The chief centres of departmental extraction were as in the previous year Kurnool West to provide employment for the Chenchus and South Malabar for departmental timber operations. There was an increased demand for bamboos in the Northern circle for sugarcane props. The Military Department removed 5,094 tons of hay during 1919–20 from the forests. In addition to this about 1,800 tons were supplied departmentally. The departmental exploitation of hay has since been abandoned. Unprecedentedly high prices were obtained for bark leases owing to the withdrawal of Government control over prices. Later, the market price fell considerably owing to the withdrawal of the prohibition against the exportation of raw hides and to the sale of Australian and African wattle bark in the Indian markets. The *tangedu* contractors having speculated and lost heavily applied for concessions to free themselves from serious embarrassments. With a view not to handicap the industry unduly they were granted a rebate of 15 per cent on the sale amounts. The total lease amount received by the department for the right to collect bark amounted to Rs. 7·61 lakhs as against Rs. 5·72 lakhs in the previous year. **Exploitation** **Timber** **Fuel** **Sandalwood** **Bamboos** **Hay** **Tanning bark**

152. The receipts from timber and other produce removed from the forest by Government agency and by purchasers increased by Rs. 4·13 lakhs and Rs. 6·30 lakhs respectively. The grazing revenue amounted to Rs. 8·54 lakhs against Rs. 8·24 lakhs in the previous year. The total gross revenue increased by Rs. 10·28 lakhs. The increase was spread over all the circles. In the Northern, Central and Southern circles it was due to high prices realized from *tangedu* sales, while in the Northern circle it was due to large increase in the quantity of timber sold under advancing prices. The total expenditure under Conservancy and Works increased in all the circles except the Northern. In the Southern circle the increase **Finance**

was due to the extension of operations by the Forest Engineer and to payment of compensation for acquisition of the Tirumalavadi Mitta forests in the South Salem division, while in the Western circle the exploitation of the Chenat Nayar scheme accounted for the main expenditure. The expenditure under Establishments increased from Rs. 17·01 lakhs to Rs. 19·46 lakhs chiefly on account of war allowances paid to forest subordinates. The net surplus amounted to Rs. 24·28 lakhs against Rs. 17·85 lakhs in the previous year.

Research and experiments

153. A Sylvicultural Research Officer was appointed during the year to deal with the future treatment of the moist evergreen forests and the study of the regeneration of valuable timber trees of whose habits of growth little or nothing is known. He confined his attention to seven only of the most commercially valuable timber trees and was studying their habits of seeding, germination and growth of all stages on selected localities on the West Coast. In other parts of the Presidency a great deal of research work was also carried out by district officers, of which mention may be made of timber-seasoning experiments and experiments in regenerating sal carried out in Ganjām. Special observation areas for the study of sandalwood spike disease were organized in Salem and in the Central circle an experimental farm for the study of the growth of the valuable tannin yielding plant *Cassia auriculata* was maintained under a special officer.

Miscellaneous

154. Proposals were made during the year to increase the number of circles from four to six as the existing Conservators' charges are so large and unwieldy that Conservators have neither time nor opportunity to exercise control or to give the help and encouragement to young and inexperienced officers in charge of forest divisions which the present state of the department makes so desirable. The reorganization of the Imperial Forest Service with reference to the proposals of the Public Services Commission was sanctioned in November 1919 and the scheme was subsequently modified with regard to the introduction of oversea allowances towards the end of the year. Orders on the reorganization of the Provincial Forest Service were also received from the Government of India. A scheme for the reorganization of the subordinate service was also sanctioned by the Secretary of State and was given effect to from 1st October 1919. It resulted in an increase in the permanent staff of 37 rangers, 257 foresters and 770 forest guards, the post of deputy ranger being abolished and merged in the class of forester.

Forest College, Coimbatore

155. The senior students who passed from the Forest College at the end of the year were one of the best classes turned out by the institution. There has been a marked and a steady improvement in the quality of rangers since the institution of the College at Coimbatore and in the work and conduct of the subordinate establishment as the result of the institution of vernacular training schools which are recognized by Government as permanent institutions.

MINES (1919)

[*G.O. No.* 1017, *Revenue (Special), dated the* 31*st May* 1920; *Statistics of British India, Vol. I, Commercial Statistics—Mineral Production*]

Output

156. As in the previous year, mining was carried on only in the five districts of Anantapur, Kurnool, Nellore, Salem and Vizagapatam and the minerals raised consisted of gold, manganese, magnesite, mica, steatite and barytes. The quantity of steatite raised fell from 10 to 4 tons and that of barytes from 1,200 to 232 tons. The improvement of the market consequent on the cessation of the War gave an impetus to the output of the other minerals generally, manganese and mica increasing, by 548 and 81 tons, to 2,778 and 402 tons, respectively. The quantity of magnesite extracted rose from 5,773 to 13,012 tons. The output of gold, however, showed a further reduction due largely to the suspension of mining operations in two mines in Anantapur, one of which was closed during the year owing to the high cost of chemicals. From a total quantity of 11,400 tons of quartz raised during the year, 11,018 ounces (troy) of gold and 753 ounces (troy) of silver were extracted. The decrease in the total output of both the minerals was 7,229 ounces as compared with that of the previous year.

General condition of the employees

157. Vizagapatam, Kurnool and Salem continued to remain immune from epidemics. In Nellore fifty children were found to be ill with malaria and thirty of them had enlarged spleens. There were four fatal cases of cholera and ten of influenza amongst the mining population of the district. Two cases of smallpox occurred in Anantapur of which one proved fatal. The general health of the employees elsewhere continued to be good.

Wages

The rates of wages paid to labourers in Anantapur continued to be the same as in 1918, but in Nellore and Salem there was a slight rise in the wages paid to men, women and children.

Employment of women and children

Except for a slight shortage of labour in parts of Nellore, the supply of labour continued to be sufficient. Neither women nor children were employed below ground in Anantapur or in the mica mines of Salem. The steatite mines in Kurnool continued to employ women below ground and children were so employed in the barytes mine in the same district. Both women and children were employed below ground in Vizagapatam, Nellore and the magnesite mines in Salem.

Accidents

Two accidents involving the death of two persons and serious injury to three persons were reported in Nellore. Three accidents, one in the magnesite mine in Salem and two in the gold mine in Anantapur, resulted in serious injuries to five persons. There were no accidents in Vizagapatam and Kurnool.

MANUFACTURES (1919-20)

[*G.Os. No.* 1111, *Revenue (Special), dated the* 15*th June* 1920, *and No.* 829, *Revenue (Special), dated the* 29*th April* 1920; *Report of the Department of Industries, Madras, for* 1919-20; *G.O. No.* 1206, *Revenue (Special), dated the* 2*nd July* 1920; *Statistics of British India, Vol. I, Commercial Statistics*]

General

158. The number of cotton mills which worked in the Presidency during the year was 20, or one more than in the previous year, of which four were in the French Settlement of Pondicherry and one in the Cochin State.

Spinning and weaving

These had nearly 4,400 power looms and 495,000 spindles at work and gave employment to about 30,000 operatives. As in the previous year all except two of these concerns were worked as Joint Stock companies. The number of spinning and weaving concerns which were not worked by mechanical power and were therefore not classed as mills decreased by two to four. Handloom weaving is an important cottage industry in the Presidency and the Department of Industries endeavoured as usual to introduce improved methods and machinery amongst the weavers. An

investigation was also undertaken into the condition of the industry in its technical aspects and into the social and economic condition of the weavers. The three jute mills in the Northern Circars continued to work during the year.

Jute mills

Leather

Owing to the boom in the leather trade the number of tanneries increased from 24 to 46 of which three, together with the two leather works which worked as in the previous year, came under the Factories Act. Three additional leather manufacturing firms have recently been established in Madras City: and it is probable that the manufacture of finished leather goods will develop considerably in Madras during the next few years and that an export trade in foot-ware may be developed, especially to South Africa where there is a large market for this class of leather goods. The prohibition on the tannage of sheep and goat skins by the Madras tanners, which had been in force during the greater part of 1917–18 and 1918–19 was removed early in 1919 with the result that certain tanners immediately stopped the input of hides and turned their attention to skins, but, owing to the exceedingly high price of raw skins, many continued tanning hides so long as they could dispose of them to Government under the scheme of control. An important event of the year in connexion with the trade in hides and skins was the passing of an Act by the Government of India imposing a tax of 15 per cent on all hides and skins exported from India but providing for a rebate of 10 per cent on such hides and skins as are exported within the British Empire.

Coir

Cotton ginning

The coir industry was represented by 22 concerns as against 18 in the previous year. The number of cotton ginning and pressing factories remained almost the same as in the previous year. For some time past attention has been devoted to the question of controlling and licensing cotton gins and presses in order to reduce the damage to the lint which results from the bad condition of the small ginneries and to prevent the mixture of short and long staple cotton. In their report, received during the year, the Indian Cotton Committee recommend that all ginning and pressing factories should be required to take out licences and lay down a series of conditions to which such factories should be required to conform. The Government of India have accepted the committee's recommendations which taken in conjunction with their other proposals should do much to enhance the reputation of Indian cotton.

Other manufactures

There were no appreciable changes in the number of concerns which were engaged in other manufactures.

Factories (1919)

159. Ten factories were removed from the register during the year and an equal number comprising eight ginning or pressing factories and two rice mills was brought on to the list. In accordance with the terms of section 53 of the Factories Act, a factory in the Malabar district was declared as constituting two separate factories (textile and non-textile). There were thus 483 factories as against 482 in the previous year. The average daily number of operatives employed was 98,102 or 957 less than in the previous year, of whom 24,910 were employed in cotton spinning and weaving mills and 2,833 in jute spinning and weaving mills. There was an increasing demand for female and child labour probably due to its cheapness as compared with male labour; the number of women employed rose by over 600 to 16,450 and that of children (both males and females) by over 250 to nearly 8,000. In parts of factories where mechanical power was used special arrangements were made for the certification of children as to age and physical fitness. The health of the operatives was generally good. Several of the larger factories employed medical men, established dispensaries and provided free treatment for all cases of accidents and ailments, a measure which has been greatly appreciated by the labourers. In addition to those mentioned in the previous year a few more factories provided free housing accommodation for their operatives. Schools for the children of factory workpeople where instruction was given free were also provided at five factories. The total average attendance (which is not compulsory) at these institutions was nearly 1,000. There was an all-round increase in the wages paid to labourers during the year which was due to the rise in the price of foodstuffs. Factory labour has been in a very unsettled state

and in sixteen cases strikes were resorted to by the workmen to enforce their demands for increased wages and other concessions. Of these, thirteen occurred in factories situated in Madras—one in a textile factory, six in printing works, three in iron works and foundries and one each in cement works, tramway workshops and aluminium works. Three strikes were declared in the mufassal—one each in a sugar factory in the Tinnevelly and the South Arcot districts and the other in a textile factory in the Coimbatore district. The demands made by the workmen were chiefly in regard to an increase in wages, grant of bonus, rice allowance, reduction in working hours and additional holidays. In nine cases the demand for higher wages was acceded to and the men resumed duty ; in three the strikers were replaced by new employees, in four the strike collapsed after a few days. Eight fires occurred during the year in seven factories and the loss was considerable. No lives were however lost in any of these. In 413 factories or five more than in the previous year, an interval of half an hour's rest was allowed after every six hours' work and thirty-one factories, or two less than in 1918, worked by a system of shifts. In the case of the latter steps were taken, prior to the grant of the necessary permission, to ascertain that the provisions of the Factories Act in regard to the sufficiency of lighting, and the employment of women and children had been complied with. The number of accidents rose, by no less than 247, to 656, although only seven of them proved fatal as against nine in the previous year. A good number of these was caused by machinery although dangerous machinery was fenced in an efficient manner in all factories except four. All these accidents were due to carelessness on the part of the labourers and their inability to recognize the necessity for exercising a little precaution, care and commonsense while on duty.

Department of Industries

GENERAL

160. The most important event of the year was the receipt of the Secretary of State's despatch signifying his general assent to the recommendations of the Indian Industrial Commission and accepting the two fundamental principles underlying those recommendations, viz., that in future the Government should play an active part in the industrial development of the country and that for this purpose, it should provide itself with adequate administrative equipment and reliable scientific and technical advice. The publication of the Commission's report and of the despatches of the Government of India and the Secretary of State thereon led to a great awakening of interest in such development as was evidenced during the year in the considerable number of new companies floated. Fifty industrial and banking concerns were formed with a capital of Rs. 119 lakhs. The more important of the engineering and leather manufacturing firms having completed their war contracts turned their attention to supplying the normal peace requirements of Government departments and the civilian trade. Among new developments may be mentioned the manufacture by a large engineering firm of centrifugal pumps, disintegrators, water cocks and a wide range of spares for Hornsby oil-engines, which prior to the war were invariably imported from England. The same firm also successfully established the manufacture of stocks, dies and taps as well as lathes, milling cutters and metal spinning machinery. The possibility of developing certain industries was under the consideration of important financial syndicates during the year. Of these mention may be made of the exploitation of the oil-seed industry and the establishment at Bezwada of a factory for the production of cement on a large scale. The possibility of finding coal in the Gōdāvari valley has been under investigation for some time and during the year an officer of the Geological Survey of India submitted a report on the sites suitable for boring in the Beddadanole coal field. In view of the impetus which the discovery of coal in paying quantities within a reasonable distance of Madras would give to industrial development in the Presidency, endeavours were being made to induce private companies to put down borings at the sites selected and to interest firms and syndicates

Oil-seed industry

Cement

Coal

Drugs and essential oils

Fruit preservation

Minor industries

The Government Soap Works

in the exploitation and development of the field. A collection of samples of aromatic gums and oleo resins, available in commercial quantities in Madras forests, was made during the year for a large London firm of manufacturing chemists who have promised to consider the question of establishing a factory in Southern India for the manufacture of drugs and essential oils. Research on glue was continued and the construction of an experimental factory was begun. Experiments in fruit preservation were undertaken during the year in Coonoor by Sir Frederick Nicholson. The plant was domestic in character and some 160 experiments were made with about 18 different sorts of fruits. About 1,300 lb. of jams, butters, cheeses and jellies were made and sold. Forty recipes were found successful and 36 different varieties of jams and jellies were shown at the Women's Work Exhibition in Madras in November 1919. Proposals were considered for the opening of a factory with the double object of establishing the industry on the Nilgiris and developing systematized fruit-culture. A useful experiment outside these operations was successfully effected in the drying of ripe bananas. The minor industries laboratory was opened by Sir Frederick Nicholson at Coonoor with the object of investigating the manufacture of inks, adhesives and vinegar. Inks were mainly dealt with during the year and many interesting experiments made. The Government Soap Works at Calicut accomplished another year's successful work.

SEA-BORNE TRADE (1919-20)

[*Review of the Sea-Borne Trade of the Madras Presidency for the year 1919-20; Annual Volume of the Sea-Borne Trade and Navigation of the Madras Presidency; Statistics of British India, Vol. I, Commercial Statistics—Foreign Trade and Shipping; Review of the Trade of India. Accounts relating to the Sea-Borne Trade of British India. Annual Statement of the Foreign Sea-Borne Trade and Navigation of British India, 2 Vols. Annual Statement of the Coasting Trade and Navigation of British India*]

General summary

161. The aggregate value of the sea-borne trade of the Presidency was Rs. 7,216 lakhs (the highest on record), showing an increase of Rs. 1,645 lakhs, or nearly 30 per cent as compared with that of the preceding year, and of Rs. 1,400 lakhs, or 24 per cent, as compared with 1913-14. The year may be said to mark the beginning of a new era in the development of trade and commerce, which in the quinquennium ending 1918-19 were affected by abnormal conditions arising from the war. During this period, the shortage of freight was the principal factor which largely arrested both the import and export trade and this continued to be felt for a few months after the signing of the armistice in November 1918 ; but a great improvement in the situation was effected after April 1919 by the release in increasing numbers of vessels used for war purposes and by the provision of new tonnage. The additional tonnage available, and the considerable fall in freights and insurance charges, were among the principal causes which led to a general revival in trade during the year. The removal of nearly all the restrictions and prohibitions in force during the war, also contributed in no small degree towards the great expansion which took place. Foreign trade including Government transactions improved by Rs. 1,258 lakhs, or 34 per cent, and coasting trade by Rs. 387 lakhs or 21 per cent. Under foreign trade, imports expanded by Rs. 84·64 lakhs or 6 per cent, and exports by Rs. 1,17,321 lakhs or 48 per cent. Under coasting trade imports of private merchandise advanced from Rs. 952·06 lakhs to Rs. 1,450·67 lakhs while exports receded from Rs. 858·06 lakhs to Rs. 752·17 lakhs. The excess of exports over imports was Rs. 2,203 lakhs as against Rs. 1,120 lakhs in the previous year.

Balance of trade

162. The total gross customs revenue was Rs. 110·52 lakhs, an increase over the previous year of Rs. 14·43 lakhs, or 15 per cent. The amount of import duty realized increased from Rs. 88·85 lakhs to Rs. 103·19 lakhs, or by 16 per cent. Customs revenue

163. The total value of foreign imports under food, drink and tobacco decreased from Rs. 246·48 lakhs to Rs. 168·87 lakhs. The total imports of liquors increased by 22 per cent in gallonage and 16 per cent in value. The trade in ale, beer and porter in bulk revived and showed an expansion from 520 gallons in 1918–19 to 18,720 gallons, while the imports in bottles further declined from 77,750 gallons to 59,455 gallons. Supplies from the United Kingdom improved from 35,850 gallons to 48,917 gallons, but the trade in Japanese bottled beer receded from 40,820 to 13,801 gallons. Imports of ale and beer from Australia and Holland amounted to 9,059 and 5,086 gallons, respectively, against none in the previous year. Under spirits, the imports expanded by 23 per cent in quantity and 4 per cent in value. The value of imports of provisions and oilman's stores totalled Rs. 27·54 lakhs, an increase of Rs. 5·59 lakhs, or 26 per cent. Biscuit showed an increase from Rs. 0·62 lakh to Rs. 3·12 lakhs and condensed milk from Rs. 1·96 lakhs to Rs. 3·71 lakhs. Imports of spices declined from Rs. 62·15 lakhs to Rs. 49·36 lakhs. Betelnuts formed as usual the bulk of the imports under this head and amounted to 237,461 cwt. valued at Rs. 47·35 lakhs, against 315,881 cwt. valued at Rs. 59·43 lakhs, Ceylon and the Straits Settlements supplying 47 and 53 per cent of the quantity. The imports of refined sugar amounted to 153,707 cwt. valued at Rs. 44·07 lakhs, a decrease of 80 per cent in quantity and 62 per cent in value. Imports of unrefined sugar were only 94 cwt. High prices of country jaggery induced larger imports of cheap molasses for distillery purposes, as imports had been restricted during previous years on account of the war. The total imports of tobacco were 356,493 lb. valued at Rs. 11·37 lakhs against 587,640 lb. valued at Rs. 18·87 lakhs, a decrease of 40 per cent both in quantity and value. The total value of raw materials and unmanufactured articles improved from Rs. 63·18 lakhs to Rs. 180·53 lakhs. The effect of the additional tonnage provided by the release of a large number of oil-carrying vessels from war service, and the removal of the restrictions on exports from the United States of America, was manifest in the marked improvement in the receipts of mineral oils from 3,436,805 gallons valued at Rs. 12·59 lakhs in 1918–19 to 18,545,102 gallons valued at Rs. 127·93 lakhs. There was a further decline in the imports of seeds, which receded in value from Rs. 21·42 lakhs to Rs. 6·53 lakhs. Imports of raw silk from China again expanded from 126,316 lb. to 233,869 lb. in quantity, and from Rs. 11·65 lakhs to Rs. 18·67 lakhs in value. Imports of teakwood from Siam improved from Rs. 0·18 lakh to Rs. 5·39 lakhs, while those from Ceylon declined from Rs. 1·35 lakhs to Rs. 0·13 lakh. The total value of imports of manufactured articles increased from Rs. 825 lakhs to Rs. 949·91 lakhs. Imports under the main head "Apparel" declined in value by Rs. 3·33 lakhs. The effect of the withdrawal in December 1918 of the prohibition on the import of motor-cars and motor-cycles was very noticeable in the great expansion in imports which took place during the year under review. The value of motor-vehicles and accessories rose from Rs. 2·77 lakhs to Rs. 37·38 lakhs. Nine hundred and sixty-six motor-cars (874* from the United States of America, 50 from the United Kingdom and 42 from other countries) and 471 motor-cycles (330 from the United Kingdom, 104 from the United States of America and 37 from other countries) were imported as compared with six cars and 77 cycles received in the previous year. It is also interesting to note, as indicative of an improvement in road transport, that the number of motor wagons imported was 107, of which 76 came from the United States. Imports of cycles and accessories improved from Rs. 2·90 lakhs to Rs. 5·44 lakhs, owing to larger receipts from the United Kingdom. The value of carriages and carts imported

Foreign imports
FOOD, DRINK AND TOBACCO
Liquors
Provisions and oilman's stores
Spices
Sugar
Tobacco
RAW MATERIALS AND PRODUCE AND ARTICLES MAINLY UNMANUFACTURED
Oils
Seeds
Textile materials
Wood and timber
MANUFACTURES
Apparel
Carriages including cycles and motor-cars

* This number included 397 cars shipped from New York but made in Canada.

also increased from Rs. 0·70 lakh to Rs. 2·13 lakhs. Chemicals showed a further contraction from Rs. 22·73 lakhs to Rs. 10·44 lakhs. Imports of drugs and medicines totalled Rs. 12·57 lakhs against Rs. 9 lakhs. Imports of camphor amounted to 59,330 lb. valued at Rs. 2·65 lakhs, against 109,474 lb. valued at Rs. 2·50 lakhs. Proprietary and patent medicines improved from Rs. 1·58 lakhs to Rs. 2·57 lakhs. There was a marked increase in the case of imports of hardware, the value of which rose from Rs. 14·60 lakhs to Rs. 37·66 lakhs, or by 158 per cent. An appreciable improvement was also recorded in the imports of instruments and apparatus which rose in value from Rs. 8·85 lakhs to Rs. 17·23 lakhs. Imports of cutlery were valued at Rs. 1·57 lakhs as compared with Rs. 0·69 lakh in the previous year. A very satisfactory feature of trade during the year was the continued expansion of imports under this head by Rs. 3·72 lakhs to Rs. 15·72 lakhs. Imports of alizarine dyes, which came, as in the previous year, entirely from the United Kingdom, advanced in quantity from 405,862 lb. to 761,979 lb., or by 88 per cent, and in value from Rs. 8·05 lakhs to Rs. 9·04 lakhs, or by 12 per cent. Imports of aniline dyes amounted to 98,619 lb. valued at Rs. 2·50 lakhs against 11,984 lb. valued at Rs. 0·84 lakh. Imports of wattle bark from Natal continued to increase, the figures showing a rise from 20,731 cwt. valued at Rs. 1·52 lakhs to 54,268 cwt. valued at Rs. 3·22 lakhs. The value of imports of glassware increased from Rs. 4·13 lakhs to Rs. 7·97 lakhs, or 93 per cent. The imports of earthenware amounted to Rs. 2·10 lakhs as compared with Rs. 1·49 lakhs in 1918–19. Greater shipping facilities and heavy demands resulting from various industrial developments in the Presidency led to a large increase in the imports of machinery, the value rising by Rs. 38·94 lakhs to Rs. 68·63 lakhs, or by 131 per cent. Imports of iron and steel which had declined so considerably during the war, amounted to 20,804 tons, valued at Rs. 89·40 lakhs, representing a notable advance of 82 per cent in quantity and 34 per cent in value. Imports of yellow metal sheets showed a remarkable increase from 1,268 cwt. to 14,721 cwt. Imports of tin rose by 117 per cent in quantity. Larger receipts of tiles, ingots, etc., improved the trade under copper, and increased imports of aluminium were also recorded. The total value of imports of paper and pasteboard declined from Rs. 53·36 lakhs to Rs. 24·35 lakhs, or by 54 per cent. Imports of printing paper, which is the most important item under this head, were reduced in quantity from 49,016 cwt. to 11,996 cwt. and in value from Rs. 23·44 lakhs to Rs. 4·10 lakhs. The other items showing decreases were writing paper and envelopes from Rs. 8·99 lakhs to Rs. 7·55 lakhs, other kinds of paper from Rs. 9·20 lakhs to Rs. 7·41 lakhs, paper manufactures from Rs. 6·05 lakhs to Rs. 1·34 lakhs and pasteboard and millboard from Rs. 5·68 lakhs to Rs. 3·94 lakhs. The imports of railway plant and rolling stock exhibited an increase of nearly Rs. 30 lakhs in value. Carriages and wagons improved from Rs. 4·54 lakhs to Rs. 15·80 lakhs, locomotive engines from Rs. 5·25 lakhs to Rs. 7·32 lakhs and materials for construction from Rs. 0·18 lakh to Rs. 16·76 lakhs. The total value of imports of yarns and textile fabrics declined from Rs. 452·91 lakhs to Rs. 397·07 lakhs. The total value of the imports of cotton goods, representing 28 per cent of the total foreign imports, decreased by 12 per cent. The increased value of Rs. 15·69 lakhs, or 17 per cent, under grey goods was brought about by larger receipts of dhutis, saris and scarves Rs. 12·47 lakhs, long cloths and shirtings Rs. 7·31 lakhs, while jaconets including madapollams, mulls, etc., declined by Rs. 4·76 lakhs. Larger arrivals of nainsooks to the extent of Rs. 7·71 lakhs, mulls Rs. 6·41 lakhs, long cloths and shirtings Rs. 1·88 lakhs, dhutis, saris and scarves Rs. 1·85 lakhs and of jaconets including madapollams Rs. 1·10 lakhs accounted for an increase of Rs. 18·26 lakhs, or 34 per cent, under white piece-goods. Under coloured goods, which fell by Rs. 13·50 lakhs or 17 per cent, prints and chintz showed a decline of Rs. 11·26 lakhs, saris and scarves of Rs. 6·34 lakhs, while shirtings improved by Rs. 2·14 lakhs. Imports of cotton twist and yarn declined by 36 per cent both in quantity and value. Grey yarns declined by five per cent in quantity and coloured yarns and unspecified descriptions by 16 and 77 per cent. Under

Chemicals, drugs and medicines

Cutlery, hardware, implements and instruments

Dyes and colours

Glassware and earthenware

Machinery

METALS

Iron and steel

Other metals

Paper, pasteboard and stationery

Railway plant and rolling stock

Yarns and textile fabrics

Cotton goods

grey yarns, the common counts 31 to 40 further declined from 353,200 to 154,012 lb. or by 56 per cent, owing to high prices at home and to the competition of cheap yarn from Indian mills, and Japanese yarn imported by rail from Bombay and other places. Counts above 50 showed an increase of 79 per cent. Imports of arms, ammunition and military stores declined from Rs. 11·64 lakhs to Rs. 7·35 lakhs. The total value of imports of miscellaneous and unclassified articles fell from Rs. 42·27 lakhs to Rs. 38·58 lakhs. The value of articles imported by post amounted to Rs. 37·77 lakhs against Rs. 34·56 lakhs in the previous year.

Other minor items

164. The total value of exports of food, drink and tobacco declined from Rs. 591·44 lakhs to Rs. 578·55 lakhs, or 2 per cent. The exports of grain and pulse declined by 1,884,446 cwt. in quantity and Rs. 159·03 lakhs in value. Exports of spices improved by 5 per cent in quantity and 30 per cent in value. The exports of unrefined sugar, which accounted for 95 per cent of the total exports under sugar, amounted to 248,577 cwt. valued at Rs. 33 lakhs against 80,493 cwt. valued at Rs. 7·19 lakhs. A satisfactory increase in the acreage and production of tea was followed by an expansion of 9 per cent both in the quantity and value of exports from 27·06 million lb. valued at Rs. 185·23 lakhs to 29·45 million lb. valued at Rs. 202·74 lakhs. An interesting feature of the trade in coffee during the year was that, although the production was 50 per cent less than in the previous season, exports rose from 155,980 cwt. to 233,479 cwt., or by 50 per cent in quantity and from Rs. 83·40 lakhs to Rs. 146·72 lakhs, or by 76 per cent in value. The total exports of tobacco expanded by 3·06 million lb. to 7·02 million lb., the value rising by Rs. 17 lakhs to Rs. 29·16 lakhs. The total value of exports of raw materials increased from Rs. 651 lakhs to Rs. 1,308 lakhs, or by 100 per cent. As usual the share of this Presidency in the exports of raw hides has been trifling, the total exports amounting to only 1,352 cwt. valued at Rs. 0·58 lakh. Exports of raw skins, which amounted in the pre-war year to only 27,932 cwt., improved from 75,844 cwt. in 1918-19 to 81,161 cwt. in 1919-20, or by 7 per cent in quantity and from Rs. 110·16 lakhs to Rs. 192·72 lakhs, or 75 per cent in value. Shipments of goat skins amounted to 66,735 cwt. valued at Rs. 175·10 lakhs, and of sheep skins to 14,425 cwt. valued at Rs. 17·63 lakhs. The progressive increase in the exports of oils noticeable during recent years was maintained in 1919–20, the total value amounting to Rs. 100·10 lakhs. Animal oils (principally fish oil) improved from 124,542 gallons valued at Rs. 0·99 lakh to 202,315 gallons valued at Rs. 1·36 lakhs. Under essential oils, exports of lemon grass oil from South Malabar showed a remarkable recovery from 13,380 gallons valued at Rs. 2·36 lakhs to 29,803 gallons valued at Rs. 9·20 lakhs. Exports of sandalwood oil declined from 225 gallons to 157 gallons. Under vegetable oils exports of coconut oil, representing 90 per cent of the total, amounted to 3·01 million gallons valued at Rs. 85·95 lakhs against 3·89 million gallons valued at Rs. 69·70 lakhs, a decline in quantity and a rise in value of 23 per cent. With the elimination of shipments to the United Kingdom for the Air Ministry, there was a considerable falling off in the export of castor oil which amounted to only 28,884 gallons valued at Rs. 1·12 lakhs as compared with 559,881 gallons valued at Rs. 13·40 lakhs in 1918–19. Shipments of groundnut oil amounted to 22,730 gallons, or about 1/12th of the exports of the previous year. The general revival of trade was most marked in the case of exports of seeds which advanced in quantity from 24,008 tons in 1918–19 to 88,595 tons, and in value from Rs. 53·74 lakhs to Rs. 301·21 lakhs. About 80 per cent of the total trade in seeds consisted of groundnuts amounting in quantity to 70,431 tons valued at Rs. 241·47 lakhs as compared with 8,429 tons valued at Rs. 11·87 lakhs in the previous year. Exports of copra, which in 1918–19, owing to the difficulty of securing freight, consisted of a single shipment of 13 cwt. to the Bahrein Islands, amounted in the year under review to 7,344 tons. The total value of textile materials improved from Rs. 128·22 lakhs to Rs. 457·93 lakhs. Exports of raw rubber declined by 27 per cent in volume and 39 per cent in value and amounted to 68,312 cwt. valued at Rs. 122·20 lakhs.

Foreign exports
FOOD, DRINK AND TOBACCO
Grain, pulse and flour
Spices
Sugar
Tea
Coffee
Tobacco
RAW MATERIALS AND PRODUCE AND ARTICLES MAINLY UNMANUFACTURED
Hides and skins, raw
Oils
Seeds
Textile materials
Rubber

MANUFACTURES

Dyes and colours

Hides and skins, tanned or dressed, and leather

Yarns and textile fabrics

Other minor items

Re-exports

The total value of exports of manufactured articles increased from Rs. 1,078·48 lakhs to Rs. 1,556·28 lakhs, or by 44 per cent. Exports of dyeing and tanning substances improved from Rs. 37·74 lakhs to Rs. 44·92 lakhs, and consisted chiefly of shipments of indigo amounting to 607 tons valued at Rs. 37·73 lakhs as compared with 512 tons valued at Rs. 32·25 lakhs in the previous year. Exports of tanned hides and skins, which are much the most important items of merchandise shipped from the Presidency accounted for 28 per cent of the total value of the export trade and amounted to 457,201 cwt. valued at Rs. 968·62 lakhs against 477·059 cwt. valued at Rs. 744·96 lakhs. Exports of tanned hides amounted to 375,023 cwt. valued at Rs. 559·43 lakhs. A remarkable growth in trade is reflected in the export of cotton twist and yarn which expanded from 478,310 lb. valued at Rs. 5·82 lakhs to 7,046,096 lb. valued at Rs. 100·31 lakhs. Exports of cotton piece-goods improved from 29·45 million yards valued at Rs. 167·10 lakhs to 34·04 million yards valued at Rs. 210·74 lakhs—an increase of 15 per cent in quantity and 26 per cent in value. Exports of coloured, printed or dyed piece-goods, representing 94 per cent of cotton piece-goods, advanced from Rs. 162·43 lakhs to Rs. 200·50 lakhs. Exports of grey goods amounted to 1,980,782 yards valued at Rs. 9·57 lakhs as compared with 670,583 yards valued at Rs. 3·40 lakhs. The export trade in Madras handkerchiefs made in hand-looms improved from Rs. 5·02 lakhs to Rs. 15·88 lakhs, of which practically the whole went to the United Kingdom. The exports of woollen goods improved from Rs. 2·60 lakhs to Rs. 3·61 lakhs. Exports of coir manufactures consisting of coir yarn and matting amounted to Rs. 97·49 lakhs against Rs. 28·46 lakhs in 1918-19. Oil cakes to the value of Rs. 62·05 lakhs were exported as against Rs. 62·48 lakhs in the previous year. The total value of re-exports amounted to Rs. 48·50 lakhs against Rs. 40·30 lakhs.

Government transactions

165. The total value of Government stores imported and exported amounted to Rs. 45·18 lakhs and Rs. 2·76 lakhs, as compared with Rs. 127·15 lakhs and Rs. 0·35 lakh, respectively, in the previous year. The decrease of Rs. 81·97 lakhs under imports was caused by reduced imports of woollen goods (— Rs. 62·67 lakhs), apparel (— Rs. 11·49 lakhs), chemicals (— Rs. 10·66 lakhs), cotton goods (— Rs. 465 lakhs), leather (— Rs. 1·53 lakhs) and glassware (— Rs. 1·37 lakhs), partly counterbalanced by larger imports of metals (+ Rs. 3·41 lakhs), arms and ammunition (+ Rs. 3·12 lakhs), instruments (+ Rs. 1·22 lakhs), and drugs and medicines. Larger exports of apparel and arms and ammunition were responsible for an increase of Rs. 2·41 lakhs under exports.

Shipping

166. The effect of the release of considerable tonnage from employment on military transport is to be seen in the increase of 43 per cent in the total amount of tonnage (2·15 million tons) available during the year for the carriage of ordinary merchandise, but there was a reduction in the total number of vessels entered and cleared from 3,062 in 1918–19 to 2,588 in the year under review. The average tonnage per vessel accordingly advanced from 491 to 830 tons. The number of vessels (excluding native craft) under the British flag which entered and cleared was 1,832, with an aggregate tonnage of 1,924,286 against 2,113 of 1,362,402 tons. The number of vessels under foreign colours was 73 with a tonnage of 163,470 against 25 of 65,133 tons. The number of vessels in the coasting trade declined from 33,533 to 32,229 but their tonnage rose from 3,892,086 to 5,920,063. The freight position in regard to shipments to the United Kingdom was on the whole much easier than in the preceding year.

Trade according to countries

167. The trade with the United Kingdom represented 48 per cent of the total trade, compared with the 53 per cent in 1918–19, and expanded by Rs. 446 lakhs or 23 per cent. The trade with the British Empire representing 68 per cent of the aggregate trade of the Presidency improved by Rs. 263·05 lakhs or 9 per cent. The trade with the continent of Europe showed an increase by Rs. 397·75 lakhs, or more than 500 per cent, and the increase occurs mainly in the trade with France, Italy and Belgium. Larger business with Japan and China mainly contributed to the increase

of Rs. 293·56 lakhs in the trade with Asiatic ports. The trade with Africa excluding Egypt did not show much variation and amounted to only Rs. 0·51 lakh. Interchanges with America, which were practically confined to the United States, expanded by Rs. 347·83 lakhs or 186 per cent.

Coasting trade

168. The total value of coasting trade excluding Government transactions improved by Rs. 393 lakhs or 22 per cent. Imports advanced by Rs. 498·61 lakhs or 52 per cent as a result of larger arrivals of grain and pulse, mineral oils and sugar, while exports receded by Rs. 105·89 lakhs or 12 per cent in consequence of smaller shipments of raw cotton, pepper, coffee and rice, partly set off by larger shipments of cotton goods and groundnuts.

Ports

169. The relative importance of the trade of the outports remained much the same as in the previous year except that Dhanushkodi and Calicut, which held the fourth and sixth rank, have changed places. All the ports except Dhanushkodi and Negapatam showed increased trade. The value of the sea-borne trade on private account at the Port of Madras, representing 51 per cent of the trade of the whole Presidency compared with 48 per cent in the previous year and 41 per cent in 1913–14, amounted to Rs. 3,654·25 lakhs against Rs. 2,609·06 lakhs in 1918–19, an increase of Rs. 1,045·19 lakhs, or 40 per cent.

Miscellaneous

170. The total revenue receipts for the Presidency rose from Rs. 1,08,30,799 to Rs. 1,27,82,256, or by 18 per cent. The total disbursements on account of customs for the whole Presidency were Rs. 7,72,311 as compared with Rs. 6,97,012 in 1918–19. The number of cases dealt with under the Sea Customs Act during the year was 1,186 against 1,177 in the previous year. Seven hundred and nine cases occurred at Madras and 477 at the outports. Penalties realized Rs. 3,84,610 against Rs. 28,250 in 1918–19, the increase being mainly due to the heavy penalties imposed for infringements of the prohibition on the importation of gold. These infringements related chiefly to the smuggling of gold by passengers from the Straits and Ceylon. Eighty-one cases of smuggling were detected at the chief port, the acquisition value of the gold seized amounting to Rs. 7,23,000. There were also 16 cases at Dhanushkodi, 11 at Tuticorin, and 5, 3 and 1 at Pāmban, Negapatam and Cuddalore, respectively, the aggregate value in the 36 cases being about Rs. 1·25 lakhs. Heavy penalties were imposed in the majority of these cases, and the gold was taken over on behalf of Government under the Gold (Import) Act XXII of 1917. A certain amount of gold was also declared by passengers, payments for which at the prescribed acquisition rates amounted to about Rs. 2,38,000. Orders on a large number of cases of gold smuggling across the frontiers of Pondicherry and Karikal were pending at the close of the year.

PUBLIC WORKS

GENERAL (1919–20)

[*Administration report of the Public Works Department, Madras Presidency, for the year* 1919–20]

Administrative changes

171. There was no change in the permanent strength of the Engineer establishment. A revised scale of pay was sanctioned by the Government of India for the Imperial and Provincial services of that establishment with effect from the 30th August 1919, each comprising a junior and a senior scale, the former to be drawn by officers holding charges of less importance than a division and the latter by those holding divisional and other important charges. It was further re-organized by the amalgamation of the Imperial and Provincial services into one service designated "The Indian Service of Engineers." The strength of the upper subordinate

establishment was increased by five to provide for the recruitment of the staff required for Forest Engineering works. The services of two upper subordinates were placed at the disposal of the Army Department for military duty during the year. Twenty-one officers and subordinates returned from military duty and one subordinate obtained the meritorious service medal for valuable services with the British Forces in Mesopotamia. In the I Circle a new subdivision (the Indravati subdivision) was formed in the Koraput division as the jurisdiction of each of the existing subdivisions was too extensive to be managed by a single subdivisional officer. The period of continuance of the temporary Koraput division was extended by one year. The Kalingiya subdivision of the Ganjām district was closed and incorporated in the Russellkonda subdivision. The famine operations in Ganjām were continued up to 31st December 1919 when the two famine subdivisions of Russellkonda and Kallikota were closed. Of the two temporary subdivisions in the III Circle, the Hindri bridge subdivision continued to work throughout the year while the temporary Penner Anicut subdivision was reconstituted for only part of the year. In the V Circle a temporary subdivision was constituted in the South Presidency division for the widening of the Government House and the Penitentiary bridges, Madras. There was no change in the VI Circle except that the work connected with the Tuticorin water-supply scheme was transferred from the charge of the Executive Engineer, Tinnevelly division, to that of the Executive Engineer, Madura Drainage division, and a temporary subdivision known as the "Tuticorin water-supply scheme subdivision" with headquarters at Palamcottah was formed.

Chief Engineer's office

Technical section

172. Seventy-five estimates of the aggregate value of Rs. 165·53 lakhs were scrutinized during the year. Twenty-three of these totalling Rs. 121·07 lakhs related to water-supply, seven aggregating Rs. 10·72 lakhs to drainage and 32 totalling Rs. 28·44 lakhs to roads and bridges. The balance of Rs. 5·30 lakhs related to 13 miscellaneous schemes. The more important of the schemes dealt with were the Bellary water-supply scheme (revised estimate fifteen-gallon-scheme Rs. 17·54 lakhs, ten-gallon-scheme Rs. 16·36 lakhs), the Coimbatore water-supply scheme (Rs. 33·00 lakhs) and the Cuddalore water-supply scheme (Rs. 14·60 lakhs—alternative estimate Rs. 15·42 lakhs).

Consulting Architect's section

The Consulting Architect prepared about 279 drawings for various buildings, and specifications and schedules of quantities for most of them. One hundred and ninety-eight estimates, in all of the total value of Rs. 87·82 lakhs, were scrutinized during the year. Of these 20 works cost above one lakh each, 33 above half a lakh each and the remaining below half a lakh each.

Electrical schemes and works

The year witnessed a further advance in the supply of electricity for public and private consumption. The number of consumers in Madras City, apart from the 69 power consumers, rose to 3,130 and the consumption to 6,584,903 units. This increased use of electricity has necessitated the complete renewals of practically the whole of the generating and sub-station plant and the erection of additional sub-stations in several parts of the city. In the mufassal the increasing popularity of electricity was evidenced by the large number of applications for licences to put down plant and mains for the supply of electric energy. The number of private plants in use at the end of the year was 149. To increase the standard of electric wiring work and to enable the public to secure the services of qualified men the Government have instituted examinations in the subject which are held twice each year and certificates of competency issued. Two such examinations were held during the year and certificates conferred on eleven persons. The Electrical Engineer to Government scrutinized during the year 167 estimates of the aggregate value of Rs. 2·87 lakhs. The more important of these schemes relate to the provision of fans and lights in the Rāyapuram Hospital and additions and alterations to the electric installation in Government House, Madras. The number of installations under Public Works Department's maintenance throughout the Presidency was 126 as against 95 in the previous year. Among the more important of the

new installations mention may be made of those at the Royapettah Hospital, Victoria Buildings, and Marine Aquarium. The aggregate capital cost of the installations under P.W.D. maintenance is Rs. 13·29 lakhs. The amount spent on their maintenance apart from the actual current consumption charges was Rs. 1·14 lakhs as against Rs. 0·75 lakh in the previous year. The total number of fans working was 2,747, lights 8,725 and motors other than fans 45.

CIVIL WORKS (1919-20)

173. The total expenditure for the year on civil works including expenditure from contributions, minor works and repairs was Rs. 65·10 lakhs as against Rs. 50·94 lakhs in the previous year. Good progress was made during the year on the new civil hospital at Vizagapatam, the expenditure being Rs. 1·19 lakhs which brings the total outlay to Rs. 3·26 lakhs against the estimated cost of Rs. 4·98 lakhs. In the case of the new hospital at Kurnool the expenditure during the year was Rs. 0·31 lakh which brings the total outlay to Rs. 1·02 lakhs against the estimated cost of Rs. 1·48 lakhs. The work of constructing a pier at Tellicherry which was in abeyance for some time was resumed during the year and a sum of Rs. 0·57 lakh was spent bringing the total outlay up to date to Rs. 2·25 lakhs against the estimated cost of Rs. 3·42 lakhs. Very good progress was made on the new Engineering College, Guindy. The year's expenditure was Rs. 2·01 lakhs and the total outlay to end of the year, Rs. 11·77 lakhs, while the estimated cost of the work is Rs. 15·84 lakhs. The construction of a central block to the Queen Mary's College at Madras was in progress during the year and a sum of Rs. 0·45 lakh was spent against the estimated cost of Rs. 2·40 lakhs. The construction of Bi and Bii Police stations in the city was nearing completion at the end of the year, the total expenditure amounting to Rs. 3·17 lakhs of which Rs. 0·32 lakh represented the year's outlay. An expenditure of Rs. 1·39 lakhs was incurred on the new Rāyapuram hospital bringing the total outlay on the work to Rs. 7·58 lakhs against the estimated cost of Rs. 11·96 lakhs. The expenditure on the Technical Institute, Madura, was Rs. 0·26 lakh during the year, the total outlay to end of the year being Rs. 2·67 lakhs against the estimated cost of Rs. 3·11 lakhs. An expenditure of Rs. 1·18 lakhs was incurred during the year on the construction of the new medical school, Tanjore. The total outlay so far comes to Rs. 1·63 lakhs against the estimated cost of Rs. 2·47 lakhs. The work of improving the customs accommodation at Cochin which was commenced in May 1913 is expected to be completed during the course of 1920–21. Sanction to a revised estimate for the work is awaited. The outlay so far comes to Rs. 1·40 lakhs, an expenditure of Rs. 9,151 having been incurred during the year. The construction of a new Kalingiya Ghat road was completed during the year. An outlay of Rs. 0 17 lakh was incurred on the work bringing the total expenditure to Rs. 1·92 lakhs. The work of forming a road between Kunavaram and Ippur was also in progress. An expenditure of Rs. 16,811 was incurred raising the total outlay to Rs. 26,822 against the estimated cost of Rs. 1·08 lakhs. Good progress was made on the construction of a bridge across the Hindri river in Kurnool, the expenditure during the year being Rs. 0·95 lakh thus bringing the total outlay on the work to Rs. 1·67 lakhs, against the estimated cost of Rs. 1·98 lakhs. The girder bridge over the Aliyar river at Yakkara was opened for traffic during the year. The work of widening the Government House and Penitentiary bridges, Madras, was started and an expenditure of Rs. 0·40 lakh incurred on the works against the estimated cost of Rs. 5·71 lakhs. The Ellore water-supply works was completed during the year and handed over to the municipality. The total outlay was Rs. 5·26 lakhs against the estimated cost of Rs. 5·34 lakhs. The Erode water

Works in progress

Buildings

Imperial works

Communications

Water-supply and drainage

works also were completed during the year and handed over to the municipality. The total outlay was Rs. 3·41 lakhs. Work on the Chingleput water supply scheme was in progress, the total outlay to end of the year being Rs. 0·46 lakh against the estimated cost of Rs. 2·05 lakhs. An expenditure of Rs. 0·32 lakh was incurred on improvements to Madura water works bringing the total outlay up to date to Rs. 5·82 lakhs. The estimated cost of the scheme was Rs. 6·02 lakhs. Work on the Rameswaram water supply scheme was also in progress. The outlay during the year was Rs. 0·46 lakh, the total outlay being Rs. 1·74 lakhs against the estimated cost of Rs. 2·04 lakhs. An expenditure of Rs. 1·20 lakhs was incurred on the Madura drainage scheme bringing the total outlay to Rs. 14·92 lakhs against the estimated cost of Rs. 23·86 lakhs. Some progress was made on the Vellore drainage scheme, the total expenditure hitherto incurred amounting to Rs. 2·24 lakhs. The cost of the scheme was estimated at Rs. 4·37 lakhs. Other major works of water supply and drainage were also in progress during the year.

Workshops

174. The value of work done during the year under all heads in the Dowlaishwaram workshops amounted to Rs. 2·36 lakhs as against Rs. 1·67 lakhs in the previous year. In the Bezwada workshops the value of work turned out was Rs. 1·02 lakhs as against Rs. 0·77 lakh in the previous year. The value of work done in the Public Works Workshops at Madras has after the fall noticed last year shown an increase of Rs. 0·70 lakh over and above the value of the outturn in the previous year.

RAILWAYS (1919-20)

[*Administration report of the Public Works Department, Madras Presidency, for the year* 1919–20*; Statistics of British India, Vol. I, Commercial Statistics—Railways*]

Development

175. The open mileage at the beginning of the year was 1,700 miles broad gauge, 2,002 miles metre gauge, and 123 miles narrow gauge. Besides this, there were 214 miles of railway owned by the District Boards of Tanjore, Kistna, Coimbatore, Guntūr and Salem. During the year there was an addition of about 23 miles to the open mileage of the Tanjore District Board Railway. The Tirutturaipūndi-Vēdāranniyam line (about 23 miles in length), which was completed in December 1916 but could not be opened for public traffic for want of rolling stock, was opened on the 15th May 1919. The work on the construction of the Tinnevelly-Tiruchendūr Railway was not resumed on account of circumstances caused by the war. The Guntūr-Tenali line which was dismantled during 1917–18 was also not restored. The survey of the Shoranūr-Manantoddy line which was begun during 1917–18 was in progress. No fresh surveys were undertaken during the year.

Accidents

176. There was no appreciable decrease in the number of accidents during the year, but there were no serious accidents calling for notice.

Miscellaneous

177. The orders of the Railway Board were received on the suggestions made by the Railway administrations in connexion with the draft model agreement for working District Board railways and these were communicated to the Railway administrations for acceptance. The necessity for providing increased railway facilities in Southern India engaged the attention of the Government during the year and, as a first step, the Railway Board were addressed to arrange for a reconnaissance or preliminary survey for a line of railway between Madras and Rāmnād via Arkōnam and Trichinopoly on the broad gauge. Improved train services were introduced during the year but restrictions on traffic still continued.

TRAMWAYS (1919-20)

178. The route mileage operated upon by the Madras Electric Tramway system in Madras City was 14 miles, 6 furlongs and 107 yards, of which 5 miles, 1 furlong and 76 yards were double track. One mile, 3 furlongs and 96 yards of double track was under construction. There was at the power station one Belliss & Morcom Engine of 525 B.H.P. coupled to the Electric Generator manufactured by the Electric Construction Company, Limited. Current was as usual obtained from the Madras Electric Supply Corporation, Limited, the plant being used as a standby. Two bogie cars and four trailers were constructed during the year. The rolling stock consisted of 80 motor cars, 20 trailers, one bond testing car, one road metal carrying car and one watering car, and the average daily service was 67 cars as against 65 in the previous year. The line equipment is overhead trolley system throughout, suspended by side or centre poles. While there was an increase of over 63,000 miles in the car mileage which stood at 1,463,721 miles, the number of passengers carried fell from 22,843,349 to 21,746,621.

CANALS (1919-20)

179. Navigation was carried on as usual on the Chilka lake canal, the Dumagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vēdāranniyam canals. Excluding the Chilka lake canal and the West Coast canals, for which figures are not available, the total receipts amounted to Rs. 2·77 lakhs or Rs. 0·09 lakh less than in the previous year. The decrease occurred chiefly under the Gōdāvari and the Buckingham canals and was caused by the removal of restrictions in railway traffic imposed previously on account of the war.

IRRIGATION (1919-20)

[*Statistics of British India, Vol. I, Commercial Statistics—Irrigation*]

180. The expenditure incurred on irrigation works fell by Rs. 3·37 lakhs to Rs. 76·72 lakhs, but the revenue derived therefrom rose from Rs. 251·50 lakhs to Rs. 285·72 lakhs. The area charged as irrigated was 7,692,530 acres or 854,857 more than in 1918-19. **Gross expenditure and revenue**

181. As in the previous year there were four works sanctioned under "Major Protective works." Of these the Rushikulya system and the Venkatapuram and Bhavanasi tanks were in operation and the Mopad reservoir project was still under construction. The capital outlay was Rs. 1·52 lakhs (direct and indirect) as against Rs. 2·14 lakhs in the previous year, and the bulk of this expenditure was incurred on the Mopad reservoir project. The area irrigated under the Rushikulya system fell by 532 acres to 105,317 acres under first crop, but under second crop it rose by 1,206 acres to 3,202 acres. The gross revenue including old irrigation revenue fell from Rs. 2·44 lakhs to Rs. 2·42 lakhs and the working expenses from Rs. 0·75 lakh to Rs. 0·66 lakh. The net revenue after deducting interest charges showed a deficit of Rs. 1·48 lakhs against Rs. 1·41 lakhs in the previous year. The capital outlay on productive works (direct and indirect) fell from Rs. 7·83 lakhs to Rs. 7·12 lakhs and was incurred mainly on the Gōdāvari delta system, the Kurnool-Cuddapah canal and the Toludur project, the last of which continued to be the only work of this class under construction. In the Gōdāvari delta system, the remodelling of the Chinchinada channel and the construction of a lock and regulator on the Kakaraparru canal were completed, while the improvements to the Kovvur-Manjair junction canal, the remodelling of the Tossipudi north side channel and the improvements to the Ainapur drain were in progress. In the Kurnool-Cuddapah canal system the Chepad project was the only work of importance in progress. The total area charged as irrigated rose by 82,184 acres to 3,026,790 acres under first crop and by 157,312 acres to 690,690 acres under second crop. The gross revenue and **Class I, Major works** Protective works **Productive works**

Revenue

working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 168·11 lakhs and Rs. 30·23 lakhs respectively against Rs. 158·00 lakhs and Rs. 29·31 lakhs in the previous year. The net revenue due to improvements was Rs. 95·40 lakhs against Rs. 86·21 lakhs in the previous year, representing a return of 10·75 per cent on the capital outlay of Rs. 8·87 crores as against 9·79 per cent in 1918–19. After deducting interest charges the profit for the year was Rs. 66·65 lakhs against Rs. 57·51 lakhs in the previous year and accumulated profits to the end of the year amounted to Rs. 18 crores. Compared with the previous year, the gross revenue showed an increase of Rs. 10·11 lakhs which occurred chiefly under the Gōdāvari, the Kistna and the Cauvery delta systems, owing to the favourable character of the season. There was an increase of Rs. 0·92 lakh under "Working expenses." The remissions granted under "Protective" and "Productive works" were Rs. 2,518 and Rs. 2,27,298 respectively against Rs. 4,099 and Rs. 6,55,111 in the previous year. They were mostly granted in the Gōdāvari and the Kistna delta systems.

Expenditure under Revenue account

Remissions

Class II, Minor works and navigation

182. The capital outlay (direct and indirect) on Minor works and Navigation was Rs. 0·65 lakh, which was incurred chiefly on the Kaniyampalayam anicut project in the Coimbatore district, the Panjapatti project in the Trichinopoly district and the Buckingham canal. The area charged as irrigated rose by 15,466 acres to 273,410 acres under first crop and by 28,229 acres to 93,068 acres under second crop. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 14·88 lakhs and Rs. 5·08 lakhs respectively against Rs. 13·22 lakhs and Rs. 4·86 lakhs in the previous year. The net revenue due to improvements rose by Rs. 1·45 lakhs. The remissions fell from Rs. 1,44,639 to Rs. 10,866, and these were granted chiefly under the Cumbum tank.

Class III works

183. The outlay on Class III works including that incurred by Civil Officers and accounted for by the Civil Department was Rs. 28·48 lakhs as against Rs. 29·24 lakhs in the previous year. The area charged as irrigated rose from 2,929,061 acres to 3,500,053 acres and the revenue inclusive of the amount collected in the Public Works Department was Rs. 99·21 lakhs against Rs. 76·92 lakhs in the previous year. A sum of Rs. 3·70 lakhs was remitted as against Rs. 16·80 lakhs in the previous year. The total area coming within the scope of Tank Restoration Scheme investigation was 103,750 square miles. An area of 84,819 square miles of minor basins had been entered upon by the beginning of the year under review, of which 78,980 square miles had been investigated. During the year an area of 453 square miles was entered upon and 1,062 square miles investigated. Works were completed for 73,768 square miles of the area investigated, were in progress for 5,443 square miles, and were not commenced in the balance of 831 square miles. Estimates amounting to Rs. 4,69,624, or Rs. 77,496 more than in the previous year, were sanctioned for Government works. The total amount sanctioned under this head from the beginning of the operations up to the end of the year was Rs. 149·36 lakhs. The expenditure during the year was Rs. 4·16 lakhs or Rs. 6·17 lakhs including percentage charges.

Tank Restoration Scheme

Class IV, Agricultural works

184. The outlay incurred on Agricultural works fell from Rs. 8·31 lakhs to Rs. 6·58 lakhs, but the revenue increased from Rs. 0·92 lakh to Rs. 1·10 lakhs.

Investigation of projects

Small projects

185. The estimate for the Cauvery reservoir project was still under the consideration of the Government of India. The Vengalapuram project in the Nellore district, the Velgode project in the Kurnool district, and the improvements to the Kurnool-Cuddapah canal were still under consideration. The revenue aspect of the Girisola channel in the Ganjām district was under examination by the local officers and improvements to the Jayamangalam channel and the Koratholi Tampara were being investigated. The further investigation of the Vamsadhara project was ordered to be deferred. In the Gōdāvari district the estimates for the

extension of irrigation to the Coringa island were received from the Superintending Engineer, while those for the Polavaram island were awaited. The plans and estimates for (1) the distribution system of the Pratur pumping scheme in the Guntūr district, (2) improvements to the Veeranam tank and Vadavar, (3) making the Nilambur river navigable for forest produce were under the consideration of the Chief Engineer for Irrigation. For re-sluicing the Amaravati channels in the Coimbatore district instructions were given to the Superintending Engineer. Plans and estimates for a reservoir project on the Amaravati were prepared. The readings of gauges in connexion with the Meengarai and Malapuzha projects in the Malabar district were continued. In connexion with straightening the Uppanar certain proposed alterations in the alignment of the straight cut were being investigated.

Miscellaneous

186. No exceptional floods occurred during the year, nor were there any serious breaches or accidents.

Ayacut maps

187. The ayacut maps for the Kistna delta were nearing completion, while those for the Kurnool-Cuddapah canal were completed.

Hydro-electric survey

188. A concession for the utilization of the water-power from the Periyar lake in the Madura district was granted to Mr. A. H. Garrett in November 1919. Another to Messrs. Tata Sons, Limited, Bombay, for the generation of power from the Kundah river in the Nilgiris for the supply of electrical energy to the Municipalities of Coonoor, Ootacamund and Coimbatore and also to the cantonment of Wellington was under consideration. With reference to the resolution of the Government of India urging the investigation of the possible water-power resources of the country, a special officer with the requisite staff was employed for carrying out the necessary reconnaissance in respect of possible sites in the Presidency. The most promising sites were reported to be Bagra on the Kolab and Duduma on the Machkand in the Koraput and Jeypore Agencies respectively.

CHAPTER V

REVENUE AND FINANCE (1919–20)

[*Statistics of British India, Vol. II, Financial Statistics*]

REVENUE AND FINANCE OTHER THAN MUNICIPAL

(*a*) GROSS REVENUE

Revenue and expenditure

189. The following statements give the figures during each of the past two years of the Imperial and Provincial revenue and expenditure as well as the capital expenditure on State Railways and Irrigation Works not charged to Revenue :—

A.—Imperial and Provincial Funds—Receipts

Heads of account	Imperial		Provincial		Total	
	1918-19	1919-20	1918-19	1919-20	1918-19	1919-20
Principal heads of revenue	RS.	RS.	RS.	RS.	RS.	RS.
I. Land Revenue	3,45,59,338	3,56,39,800	3,45,59,338	3,56,39,800	6,91,18,676	7,12,79,600
II. Opium	6,03,150	6,07,115	...	...	6,03,150	6,07,115
III. Salt	1,77,72,899	1,51,53,932	...	...	1,77,72,899	1,51,53,932
IV. Stamps	82,20,045	94,08,020	82,20,084	94,08,020	1,64,40,169	1,88,16,040
V. Excise	2,32,22,405	2,63,07,425	2,32,22,404	2,63,07,424	4,64,44,809	5,36,14,849
VII. Customs	1,04,30,900	1,24,25,916	...	...	1,04,30,900	1,24,25,916
VIII. Income-tax	64,92,533	1,08,81,278	40,25,017	53,53,692	1,05,17,550	1,62,34,970
IX. Forest	...	...	47,91,460	62,34,149	47,91,460	62,34,149
X. Registration	...	...	27,33,200	33,24,153	27,33,200	33,24,153
XI. Tributes from Indian States.	44,96,519	44,96,519	...	...	44,96,519	44,96,519
XII. Interest	8,15,706	8,23,800	4,90,071	4,93,549	13,05,777	13,27,349
Receipts by Civil Departments						
XVI. Law and Justice—						
A. Courts of Law	...	...	10,33,903	11,94,474	10,33,903	11,94,474
B. Jails	...	...	10,96,626	6,34,450	10,96,626	6,34,450
XVII. Police	...	...	5,50,520	5,81,354	5,50,520	5,81,354
XVIII. Ports and Pilotage	...	...	124	216	124	216
XIX. Education	...	...	3,79,834	6,06,546	3,79,834	6,06,546
XX-A. Medical	...	...	3,36,042	3,17,320	3,36,042	3,17,320
XX-B. Sanitation	...	...	45,787	20,953	45,787	20,953
XXI-A. Agriculture	...	...	2,49,893	3,93,309	2,49,893	3,93,309
XXI-B. Scientific and Miscellaneous Departments.	...	...	15,60,120	19,45,018	15,60,120	19,45,018
Miscellaneous						
XXII. Receipts in aid of Superannuation.	1,11,154	90,374	1,80,222	1,99,285	2,91,376	2,89,659
XXIII. Stationery and Printing ...	33,765	23,335	1,58,270	1,46,189	1,92,035	1,69,524
XXV. Miscellaneous	12,34,504	12,61,800	2,63,429	4,45,911	14,97,933	17,07,711
XXVI. State Railways (gross receipts).	9,63,14,746	10,42,43,479	...	...	9,63,14,746	10,42,43,479
State Railways (District working expenses).	5,43,14,275	6,58,31,812	...	...	5,43,14,275	6,58,31,812
Net Receipts	4,25,00,471	3,84,17,167	...	...	4,25,00,471	3,84,17,167
XXVIII. Subsidized Companies—Repayment of advance of interest.	1,271	12,137	...	...	1,271	12,137
Revenue from Productive Public Works						
XXIX. Irrigation—Major Works—						
Direct Receipts	1,64,757	1,70,857	1,68,756	1,70,857	3,37,513	3,41,714
XXX. Minor Works and Navigation in charge of—						
Civil Officers	...	...	22,622	39,823	22,622	39,823
Public Works Officers ...	...	...	2,70,000	2,86,586	2,70,000	2,86,586
XXXI. Civil Works in charge of—						
Civil Officers	...	...	99,061	16,915	99,061	16,915
Public Works Officers ...	4,516	8,477	4,20,138	5,05,387	4,24,654	5,13,864
Total ...	15,10,67,873	15,66,32,952	8,48,81,921	9,47,70,380	23,59,49,794	25,14,03,332
Transfers between Imperial and Provincial Revenues.	— 25,83,008	— 27,60,238	+ 25,83,008	+ 27,60,238	...	...
Grand Total ...	14,84,84,865	15,38,72,714	8,74,64,929	9,75,30,618	23,59,49,794	25,14,03,332

B.—Imperial and Provincial Funds—Charges

Heads of account	Imperial		Provincial		Total	
	1918-19	1919-20	1918-19	1919-20	1918-19	1919-20
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.
1. Refunds and drawbacks	8,67,942	18,62,425	4,03,548	8,97,110	12,76,490	27,59,535
2. Assignments and compensations ...	9,57,632	9,38,814	3,09,169	2,92,890	12,66,801	12,31,704
3. Land Revenue	...	...	1,29,39,162	1,35,85,711	1,29,89,162	1,35,85,711
5. Salt	25,72,432	22,36,778	...	...	25,72,432	22,36,778
6. Stamps	2,41,624	2,89,542	2,41,624	2,89,541	4,83,248	5,79,083
7. Excise	10,52,806	11,28,128	10,52,806	11,28,128	21,05,612	22,56,256
9. Customs	4,49,539	5,09,521	...	...	4,49,539	5,09,521
10. Income-tax	44,952	74,670	44,953	74,671	89,905	1,49,341
11. Forest	...	...	31,82,521	36,93,348	31,82,521	36,93,348
12. Registration	...	...	15,10,167	16,78,874	15,10,167	16,78,874
13. Interest	...	...	3,74,983	4,18,070	3,74,983	4,18,070
14. Interest on other obligations	2,75,924	4,05,348	...	...	2,75,924	4,05,348
18. General administration	6,35,171	5,73,475	16,70,963	19,57,846	23,06,134	25,31,321
19. Law and Justice—						
A. Courts of Law	...	...	90,03,341	1,00,30,054	90,03,341	1,00,30,054
B. Jails	...	...	21,10,324	26,65,713	21,10,324	26,65,713
20. Police	...	...	1,21,14,821	1,41,46,540	1,21,14,821	1,41,46,540
21. Ports and Pilotage	...	...	44,124	36,636	44,124	36,636
22. Education	...	...	1,10,20,677	1,22,37,361	1,10,20,677	1,22,37,361
23. Ecclesiastical	3,50,675	3,44,559	...	...	3,50,675	3,44,559
24-A. Medical	...	...	26,91,352	35,72,018	26,91,352	35,72,018
24-B. Sanitation	...	...	15,61,697	21,64,179	15,61,697	21,64,179
25. Political	97,218	1,34,645	91,873	1,01,413	1,89,091	2,36,058
26-A. Agriculture	...	...	15,56,055	19,56,316	15,56,055	19,56,316
26-B. Scientific and Miscellaneous Departments.	...	16,019	17,73,460	19,42,317	17,73,460	19,58,336
27. Territorial and political pensions ...	2,75,777	2,91,799	...	...	2,75,777	2,91,799
28. Civil furlough and absentee allowances.	21,791	33,816	...	...	21,791	33,816
29. Superannuation and retired allowances.	39,929	41 120	36,14,428	36,94,107	36,54,357	37,35,227
30. Stationery and printing	8,42,705	5,85,771	13,32,509	19,51,629	21,75,214	25,37,400
32. Miscellaneous	2,18,153	1,67,742	4,90,860	7,96,052	7,09,013	9,63,794
33. Famine re- { in charge of Civil Officers.	33,631	11,46,972	11,211	3,82,324	44,842	15,29,296
lief. { Do. P.W. Officers.	36,311	17,63,783	12,103	5,87,927	48,414	23,51,710
34. Construction of protective railways ...	— 246	...	...	...	— 246	...
35. Do. irrigation works ...	2,13,652	1,55,326	...	...	2,13,652	1,55,326
39. Guaranteed companies	...	...	...	...	...	...
40. Subsidized companies	1,732	749	...	...	1,732	749
41. Miscellaneous railway expenditure ...	32,796	34,956	...	...	32,796	34,956
42. Irrigation (major works) —						
Public Works Officers (Working expenses).	10,32,334	10,45,354	10,32,333	10,45,353	20,64,667	20,90,707
Public Works Officers (Interest on debt).	15,60,395	15,70,422	15,60,396	15,70,423	31,20,791	31,40,845
43. Irrigation (minor works)—						
In charge of Civil Officers	...	...	7,53,066	7,41,828	7,53,066	7,41,828
Do. Public Works Officers.	...	...	36,63,542	33,59,510	36,63,542	33,59,510
45. Civil works—						
In charge of Public Works Officers.	1,31,110	2,32,905	54,60,426	77,30,173	55,91,536	79,63,078
Do. Civil Officers	...	...	43,61,314	34,32,643	43,61,314	34,32,643
Total expenditure charged to Revenue ...	1,19,85,995	1,55,84,639	8,65,44,808	9,81,60,705	9,85,30,803	11,37,45,344
Surplus (+) or Deficit (—)	+ 13,64,93,870	+ 13,82,88,075	+ 9,20,121	— 6,30,087	+ 13,74,18,991	+ 13,76,57,988
Grand Total ...	14,84,84,865	15,33,72,714	8,74,64,929	9,75,30,618	23,59,49,794	25,14,03,332
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.						
48. State Railways	— 4,38,879	13,40,887	...	...	— 4,38,879	13,40,887
49. Irrigation works	5,69,356	5,29,896	...	...	5,69,356	5,29,896
Total, Capital outlay ...	1,30,477	18,70,783	...	...	1,30,477	18,70,783
Grand Total (Disbursements) ...	1,21,16,472	1,74,55,422	8,65,44,808	9,81,60,705	9,86,61,280	11,56,16,127

Including the receipts and charges of the Civil and Public Works departments, but excluding the figures relating to the Army, the Post Office and Telegraph department, and the Home accounts, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 25,14,03,332, or Rs. 1,54,53,538 more than that of the previous year; the gross expenditure charged to revenue rose, by Rs. 1,52,14,541, to Rs. 11,37,45,344; these figures are, however, subject to alteration until the Finance and Revenue accounts of the Government of India are finally made up by the Comptroller-General.

Surplus revenue

190. The surplus amounted to Rs. 13,76,57,988, or an increase of Rs. 2,38,997 over that of 1918–19.

Cash balances

191. The year opened with a cash balance of Rs. 417 lakhs in the reserve treasury, the revenue treasuries and the Bank of Madras and its branches; the closing balance was Rs. 395 lakhs.

(*b*) IMPERIAL REVENUE AND FINANCE

General

192. The receipts on account of Imperial Revenue exceeded those of 1918–19 by Rs. 55,65,079. The improvement was chiefly under Income-tax (Rs. 43,88,745), Excise (Rs. 35,85,020), Customs (Rs. 19,95,116), Stamps (Rs. 11,87,935) and Land Revenue (Rs. 10,80,462), partly counterbalanced by decreases under net State Railway earnings (Rs. 40,83,304) and Salt (Rs. 26,18,967). The net transfer from Imperial to Provincial Revenues was Rs. 1,77,230 more than in the previous year. The Imperial expenditure charged to Revenue also exceeded that of 1918–19 by Rs. 35,98,644, chiefly under Famine relief (Rs. 28,40,813) and Refunds and Drawbacks (Rs. 9,94,483). The incidence of taxation per head of the population was Rs. 4-7-6·6 against Rs. 4-0-0·3 in 1918–19.

Land revenue*

193. The receipts from Land Revenue amounted to Rs. 3,56,39,800, or Rs. 10,80,462 more than those of 1918–19. The more important increases in the district collections were in Salem (+Rs. 2·22 lakhs), Tanjore (+Rs. 1·86 lakhs), North Arcot (+Rs. 1·60 lakhs), Vizagapatam (+Rs. 1·44 lakhs), Kistna (+Rs. 1·30 lakhs), Ganjām (+Rs. 1·13 lakhs), Chittoor (Rs. 1·09 lakhs) and South Arcot (Rs. ·89 lakh). The increases in the districts of Vizagapatam and Kistna were due to heavy receipts from the sale of waste lands in the Divi taluk and under the Nagavalli project, while those in other districts were due mainly to the more favourable character of the season. The incidence of taxation per head of the population amounted to Rs. 1-11-6 as against Rs. 1-10-8 in 1918–19 and was highest in the district of Kistna and lowest in Vizagapatam. The expenditure under Land Revenue being entirely Provincial is dealt with in the Provincial Section.

Customs

194. The revenue under Customs is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs exclusive of import duty on salt which was credited to salt, amounted to Rs. 1,23,13,886 as against Rs. 1,04,79,067 in 1918–19. The increase of Rs. 18·35 lakhs was chiefly made up of Rs. 14·64 lakhs under import duty, Rs. 4·73 lakhs being export duty on raw hides and skins levied from 10th September 1919 and Rs. 3·31 lakhs under miscellaneous revenue due to penalties collected on gold imported in contravention of the prohibitions imposed on the import of gold into British India partly counterbalanced by a decrease of Rs. 4·77 lakhs under export duty on rice owing to the prohibition of export of rice to foreign countries. The improvement under import duty was the result of larger collections under petroleum, liquors, metals and manufactures of metals, partly counterbalanced by smaller receipts under sugar, tobacco and articles of food and drink. The receipts under Land Customs rose from Rs. 3,51,733 to Rs. 5,12,030 owing to larger imports of cotton piece-goods and iron bars at the Pondicherry frontier and of kerosene oil at the Karikal frontier. The incidence of taxation per head of the population was As. 4-11 against As. 4-2 in 1918–19. The charges amounted to Rs. 5,09,521 as against Rs. 4,49,589 in the previous year, the grant of increased local allowances for high prices to subordinate establishments contributing in part to the increase.

Opium*

195. For information about Opium revenue, see infra under EXCISE ADMINISTRATION.

Salt

196. The number of salt factories at the commencement of the year was 85, and one of them, viz., the factory at Kuttanguli, was closed from 1st January 1920 as it was found to be expensive and unnecessary. During the seasons of 1917 and 1918, every endeavour was made to increase the output of salt so as not only to make good the shortage within the Presidency, but also to supply other Provinces. Owing to conditions connected with the war, there was at one time a prospect of securing in

* The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realizations of Opium revenue by the Excise Department) and Income-tax (excluding Super-tax and Excess profits duty) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share. But the incidence of taxation has been calculated with reference to the total receipts.

Bengal a new market for Madras salt. But the cessation of hostilities, the record manufacture in 1918, the opening up of new salt works in Bombay and in Northern India, and the extension of manufacture in Burma and Ceylon soon changed the position : and at the same time, the import of foreign salt into Bengal was resumed. The stock of salt in this Presidency became in consequence in excess of the demand, and in spite of the fact that the sales in 1918–19 exceeded those of the previous year by 950,000 maunds, the stocks on the 31st March 1919 were abnormally large. The difficulties in the way of disposing of these large stocks at a profit caused a great disappointment among the licensees and naturally reacted on the manufacturing activities of the season of 1919. Generally speaking, in all factories of the Presidency, manufacturing operations commenced later, and scraping closed a month earlier than usual with the result that the quantity produced in the season of 1919 was 1,200,000 maunds less than in the previous season. To encourage the licensees to push on manufacture more vigorously, special bonuses were granted, but several licensees did not take advantage of this concession. The existence of large stocks and a fall in the demand for Madras salt from places outside the Presidency tended to reduce wholesale prices, and retail prices also fell in sympathy with them. It was no longer necessary to control prices by the issue of salt at fixed rates to municipalities, unions and co-operative societies for sale to the public or by the sale of salt at Government depots on market days as was done in the previous year and these measures were accordingly discontinued by October 1919. The total quantity of salt manufactured during the year amounted to 14,470,545 maunds of which 4,595,484 maunds were Government salt and 9,875,061 maunds were excise salt as against 6,100,616 maunds and 10,519,818 maunds, respectively, in the previous year. The quantity of duty-paid salt imported by sea from the Bombay Presidency rose from 1,372,647 maunds to 1,399,252 maunds and that imported by rail from Bombay and Goa was 303,511 maunds as against 306,572 maunds in the previous year. The issues for home and inland consumption of locally-manufactured and imported salt slightly fell from 12,743,169 maunds to 12,679,785 maunds. The quantity issued for export by sea was 65,278 maunds. The quantities issued to the French Government and to the Travancore and Cochin Darbars were 58,474,247,086 and 17,700 maunds, respectively. The issues to Bengal decreased from 196,607 maunds to 68,465 maunds owing to the renewed imports of foreign salt into Calcutta. The available stock of Government and excise salt at the end of the year was 10,000,467 maunds as against 7,683,252 maunds in the previous year. The year's revenue amounted to Rs. 1,51,53,932 against Rs. 1,77,72,899 in 1918–19 and the decrease was mainly due to the lesser demand from other Provinces for Madras salt and the discontinuance of the auction system of sale of Government salt which fetched high prices in the previous year. The incidence of taxation which is calculated with reference to the rate of inland consumption was As. 4–10·9 as against As. 4–11·7 in 1918–19. The charges fell from Rs. 25,72,432 to Rs. 22,36,778 owing chiefly to the purchase of a smaller quantity of salt by Government from manufacturers than in the previous year and the closure of all the inland depots opened for the sale of Government salt in order to control the high prices then prevailing.

197. For information about Excise revenue, see infra under EXCISE ADMINISTRATION. **Excise* (Abkari)**

198. The revenue from stamps improved from Rs. 82,20,085 to Rs. 94,08,020 owing to the large profits made in business after the war, increased investments in landed property the value of which has risen considerably, and growth in litigation. The incidence of taxation per head rose from As. 6–4·2 to As. 7–3·2. The charges amounted to Rs. 2,89,542 against Rs. 2,41,624 in the previous year. **Stamps***

* *Vide* footnote under "Land Revenue" on page 80 supra.

Income-tax* (excluding super-tax and excess profits duty)

199. The receipts under income-tax (ordinary) amounted to Rs. 53,53,691 against Rs. 40,25,017 in 1918–19. The increase was chiefly due to the collection of large arrears outstanding at the commencement of the year which obscured the decrease caused by the raising of the taxable minimum from Rs. 1,000 to Rs. 2,000 with effect from 1st April 1919. The incidence of taxation was As. 3–11·9 per head against As. 3–1·3 per head in the previous year. The charges rose from Rs. 44,952 to Rs. 74,670 owing to the revision of Income-tax establishments in the Madras City and the mufassal districts including the appointment of a Special Officer under the Chief Commissioner of Income-tax.

Super-tax

200. The collections from super-tax rose from Rs. 24,67,516 in 1918–19 to Rs. 33,89,811 in 1919–20. Though the demand for the year was much less than that of the previous year owing to the alternative levy of excess profits duty, the collection of large arrears outstanding at the commencement of the year brought about the increase of about Rs. 10 lakhs. The incidence of taxation per head was As. 1–3·7 against 11·4 pies in 1918–19. No special staff was employed during the year for the collection of super-tax.

Excess profits duty

201. In September 1918, a resolution was adopted by the Indian Legislative Council declaring that the prolongation of the war justified India's taking a larger share of the cost of the military forces raised in this country. In order to provide the funds necessary for giving effect to the resolution, the imposition of an excess profits duty was decided upon. The change which came over the military situation since the adoption of the above resolution made it possible for the duty to be imposed on the profits of a single year. The Excess Profits Duty Act X of 1919 was thereupon passed levying a duty of fifty per cent of the excess of the profits made in 1918–19 over a certain standard of profits prescribed by the Act. Business assessed for excess profits duty was not liable to super-tax and a rebate was admissible for the purposes of income-tax in respect of amounts paid as excess profits duty. The new Act came into force on 1st April 1919 and though the demand was over a crore, the actual collections in 1919–20 amounted to Rs. 21,37,776 only. The low collections were due to late assessments, the grant of extension of time for payment of the duty, and the stay of collection pending the disposal of appeals to the Board of Revenue. The incidence of taxation per head of the population was 9·9 pies. No special staff was employed during the year for the collection of excess profits duty.

Other Imperial receipts

202. Imperial revenue from other sources amounted to Rs. 4,53,09,466 or a decrease of Rs. 40,57,197 as compared with the previous year, which occurred almost entirely under net State Railway receipts (Rs. 40,83,304). There was an increase of about Rs. 115 lakhs in working expenses both in the South Indian Railway and the Madras and Southern Mahratta Railway systems partly counterbalanced by larger traffic receipts, and it was caused chiefly by a relaxation of the economies necessitated by the war in the expenditure on maintenance of permanent ways, etc., and on locomotive carriage and wagon expenses.

Transfers between Imperial and Provincial

203. The important variations under the head "Transfers between Imperial and Provincial" were (*a*) the grant of a recurring assignment of Rs. 6,05,000 to Provincial Revenues to compensate for the loss in the provincial share of income-tax necessitated by the raising of the assessable minimum from Rs. 1,000 to Rs. 2,000, (*b*) the grant of non-recurring assignments of Rs. 1,00,000 for the construction and equipment of the Madras Trades School and of Rs. 2,00,000 towards the expansion and equipment of the Agricultural College at Coimbatore, and (*c*) the payment of Rs. 9,08,000 from Provincial to Imperial Revenues in addition to Rs. 6,25,000 paid in 1918–19 on account of the revenue realized in Madras in that year from the enhancement of the rates of income-tax as against Rs. 6,32,000 likewise paid in 1918–19 for 1917–18.

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* *Vide* footnote under "Land Revenue" on page 80 supra.

Expenditure on famine relief*

204. Owing to the failure of the monsoon in 1918–19, relief operations under the Famine Code were found necessary in the districts of Ganjām and Kistna in the closing months of that year. In Kistna, the distress was slight and relief did not pass the stage of test. In Ganjām, the distress was severe and covered an area of more than a thousand square miles in the northern part of the district. The south-west monsoon commenced well in June 1919 and gave a good start to the sowings of the early crops. The north-east monsoon commenced about the beginning of October 1919, and though the total fall in that month was below the average, the deficiency was made good by the copious fall in November 1919. With the commencement of the harvest in the middle of November 1919, it was found possible to close the famine relief works in the Ganjām district by about the end of December 1919. The expenditure on famine relief measures incurred in 1919–20 amounted to Rs. 29,10,755 as against Rs. 69,942 in 1918–19.

Other Imperial expenditure

205. The remaining Imperial expenditure amounted to Rs. 84,35,245 against Rs. 75,54,650 in 1918–19. The increase occurred chiefly under Refunds and Drawbacks (Rs. 9·94 lakhs), Interest on Provident Funds, etc. (Rs. 1·29 lakhs) and Civil Works in charge of Public Works officers (Rs. 1·02 lakhs), partly counterbalanced by a decrease under Cost of stationery purchased for central stores (Rs. 2·57 lakhs). The increase under Refunds and Drawbacks was mainly due to heavy refunds of income-tax and super-tax collections made on a large number of revision petitions relating to the years 1917–18 and 1918–19 disposed of in 1919–20 and that under Interest to the raising, with effect from 1st April 1919, of the rate of interest allowed on subscriptions to the General Provident Fund and other similar funds from 4 to 5½ per cent. The acquisition of a building for the Post Office at Madura accounts mostly for the increase under Civil Works.

Capital outlay on State railways and Irrigation works not charged to revenue

206. The capital outlay on Irrigation works not charged to revenue amounted to Rs. 5,29,896 against Rs. 5,69,356 in 1918–19 and that on State railways was Rs. 13,40,887 against *minus* Rs. 4,38,879. The increase occurred almost wholly under South Indian Railway and it was caused mostly by larger outlay on carriages and wagons and on London stores.

Imperial loans

207. The opening balance under Imperial loans on the 1st April 1919 was Rs. 1,88,61,476. A sum of Rs. 3,00,000 was advanced to the Madras Port Trust. The repayments amounted to Rs. 3,75,786, the chief items being Rs. 1,43,808 by the Madras Corporation, Rs. 1,87,673 by the Madras Port Trust and Rs. 39,648 by the Tanjore District Board Railway. The closing balance of the year was Rs. 1,87,85,690. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year, viz., Rs. 28,600, was duly paid. On the 31st March 1920 this sinking fund held Government securities of the face value of Rs. 14,69,600.

(*c*) Revenue and Finance other than Imperial.

Provincial revenues

208. The Provincial accounts opened with a balance of Rs. 2,10,28,558 on the 1st April 1919 and closed with a balance of Rs. 2,03,98,471 on the 31st March 1920. The transactions of the year resulted in a deficit of Rs. 6,30,087, which was the net result of an aggregate revenue of Rs. 9,75,30,618 and an expenditure of Rs. 9,81,60,705.

Land revenue†

209. The receipts from Land revenue amounted to Rs. 3,56,39,800 and were more than those of 1918–19 by Rs. 10,80,462. The charges were

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* The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Imperial share.

† The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realization of opium revenue by the Excise Department) and Income-tax (excluding Super-tax and Excess profits duty) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share. But the incidence of taxation has been calculated with reference to the total receipts and is mentioned in the Imperial section.

Rs. 1,35,85,711 against Rs. 1,29,89,162 in the previous year, the excess being due chiefly to the grant of increased local allowances for high prices and to larger expenditure on survey and settlement parties.

Stamps, Excise and Income-tax*

210. The receipts from Stamps, Excise and Income-tax amounted respectively to Rs. 94,08,020, Rs. 2,68,07,424† and Rs. 53,53,692 as against Rs. 82,20,084, Rs. 2,32,22,404 and Rs. 40,25,017 in the previous year. The corresponding charges were Rs. 2,89,541, Rs. 11,28,128‡ and Rs. 74,671 as against Rs. 2,41,624, Rs. 10,52,806 and Rs. 44,953 respectively in the previous year.

Forests

211. The revenue from Forests amounted to Rs. 62,34,149 against Rs. 47,91,460 in the previous year. The increase was mostly under "Timber and other produce removed from forests by Government agency" owing to the extraction and sale of a larger quantity of timber (including sandalwood) and under "Other minor produce" removed from forests by consumers or purchasers owing to the withdrawal of control over tanning materials by the Munitions Board and the consequent realization of high prices for them in the open market. The charges rose from Rs. 31,82,521 to Rs. 36,93,348 and the excess was caused chiefly by larger outlay on live-stock and roads and bridges and by the grant of increased local allowances for high prices as well as the reorganization of the executive and protective staff of the department.

Registration

212. The receipts under Registration were Rs. 33,24,153 against Rs. 27,38,200 in the preceding year, the improvement of Rs. 5·86 lakhs occurring mostly under Registration fees owing to an unprecedented increase in the number of registrations mainly as a result of the prevailing high prices. The charges of the department amounted to Rs. 16,78,874 or Rs. 1,68,707 more than in the foregoing year.

Canal revenue

213. The canal revenue collected during the year amounted to Rs. 2,76,790 or Rs. 8,955 less than in the previous year.

Other Provincial receipts §

214. The Provincial receipts under the remaining heads amounted to Rs. 80,03,142 and were higher than those of the previous year by Rs. 6,77,724. There were increases under twelve heads (+ Rs. 11,95,537) and decreases under four heads (— Rs. 5,17,813). The increases were chiefly under Scientific and Miscellaneous Departments (+ Rs. 3·85 lakhs), Education (+Rs. 2·27 lakhs), Miscellaneous Revenue (+ Rs. 1·82 lakhs), Courts of Law (+ Rs. 1·61 lakhs) and Agriculture (+ Rs. 1·43 lakhs) and the decrease was mainly under Jails (Rs. 4·62 lakhs). An increase of Rs. 1·30 lakhs under Scientific and Miscellaneous Departments, was only nominal as it represented refund of unspent balance of funds drawn from the treasury for expenditure in the previous year and the rest of the increase under the head was due to large sales of quinine. Fee receipts of certain private institutions taken over under Government management during the year and unspent balances of Provincial contributions refunded by certain private schools explain mostly the increase under Education. That under Miscellaneous revenue was chiefly brought about by larger adjustments on account of lapsed deposits credited to Government. The improvement under Courts of Law was caused chiefly by larger receipts from magisterial fines and from the fees realized by the High Court for translation and printing work done for suitors. Better yields and prices of produce on the district experimental farms and the sale of fish manure and Cambodia cotton seeds on a larger scale contributed to the increase under Agriculture. The fall under Jail receipts was mainly the result of the lack of orders for jail-made goods from the Military Department on the termination of the war.

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* *Vide* footnote under "Land Revenue" on page 83 supra.
† Includes the share of Opium revenue credited to this head.
‡ Includes expenditure relating to Opium charged to this head.
§ Excludes net amount transferred from Imperial to Provincial which has been dealt with in the Imperial section.

215. The expenditure incurred on famine relief measures was Rupees 9,70,251 against Rs. 23,314. **Expenditure on famine relief ***

216. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 7,67,40,181 and was more than that of the previous year by Rs. 92,39,920. Increases amounting in all to Rs. 1,10,07,628 appeared under eighteen heads slightly counterbalanced by decreases amounting to Rs. 17,67,708 which appeared under five heads. The more important increases occurred under Civil Works in charge of Public Works officers (+Rs. 22·70 lakhs), Police (+Rs. 20·32 lakhs), Education (+Rs. 12·17 lakhs), Courts of Law (+ Rs. 10·27 lakhs), Medical (+Rs. 8·81 lakhs), Stationery and Printing (+ Rs. 6·19 lakhs), Sanitation (+Rs. 6·02 lakhs), Jails (+Rs. 5·55 lakhs), Refunds and Drawbacks (+Rs. 4·89 lakhs) and Agriculture (+Rs. 4·00 lakhs). The increase under Civil Works in charge of Public Works officers appeared mostly under "Civil Buildings" chiefly on account of value paid for the site and building of the Royapettah hospital taken over under Government management during the year as well as for certain other buildings acquired for the use of Government departments and under Public Works Stores owing to heavy outlay on London stores. The increase under Police was caused by the grant of enhanced local allowances for high prices and by a change introduced in the system of apportionment of the cost of Railway Police between the Railway Companies and Government. Under the new system Government should meet the entire cost of the "crime and order" police, while the Railway Companies should meet the cost of the "watch and ward" police and pay to Government in addition a fixed contribution instead of both classes of expenditure being shared by Government and Railway Companies in the proportion of three-tenths and seven-tenths as heretofore. The payment of a grant for University buildings, the taking over under Government management of certain municipal colleges, increased expenditure under stipends to pupils of training schools and larger payments of subsidies to local bodies and grants-in-aid account for the increase under Education. The increase under Courts of Law resulted for the most part from the grant of enhanced local allowance for high prices, the opening of additional civil courts accompanied by the regrading of Sub-Judges and District Munsifs and the revision of pay of clerical establishments of mufassal courts. The bulk of the increase under Medical was due to the further transfer of district headquarter hospitals to Government management and to larger expenditure incurred on equipment. The postponement to the year 1919–20 of supplies to certain departments which would ordinarily have been made in 1918–19 and the further rise in the price of paper explain the increase under Stationery and Printing, while a grant of Rs. 5 lakhs paid to the Madras Corporation for water-supply and drainage schemes was mainly responsible for the increase under Sanitation. The excess under Jails appeared chiefly under Dietary charges owing to a large increase in the prison population and the abnormal rise in prices of foodstuffs. Heavy refunds of Income-tax contributed to the increase under Refunds and Drawbacks, and that under Agriculture was brought about by the increased activities of the department such as the preparation of fish and other forms of manure for sale to ryots, the extension of the area of cotton-seed farms, the opening of planting stations and the like. The decrease in expenditure was mostly under Civil works in charge of Civil officers (Rs. 14·29 lakhs), and it was due to the fact that out of a special grant of Rs. 26 lakhs allotted for payment to District Boards for improvements to important roads, Rs. 20 lakhs were paid in 1918–19 and Rs. 6 lakhs in 1919–20. **Other Provincial expenditure**

217. The Provincial advance and loan account (including loans to local bodies for railway construction) opened with a balance of Rs. 96,10,261 on **Provincial loans**

* The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Provincial share.

the 1st April 1919 and closed with a balance of Rs. 1,04,79,956 on the 31st March 1920 ; advances amounted to Rs. 20,66,853 and repayments to Rs. 11,97,158. Ryots received advances to the extent of Rs. 15,82,896 as against Rs. 7,70,775 in the previous year. The demands for these advances were unusually large during the year 1919–20, owing partly to the state of the season and partly to the employment of special staff for the popularization of these advances. The largest advances were received in the districts of Ganjām, Tanjore, North Arcot, Chittoor and Madura. A loan of Rs. 38,000 was granted to the Trichinopoly District Board for the construction of bridges. The Madura Municipality borrowed Rs. 3,05,000 for water-works and drainage. Sums amounting to Rs. 15,000 and Rs. 2,500 were advanced respectively to the Cocanada and Parlākimedi Municipal Councils for town surveys. Advances of Rs. 28,000 and Rs. 20,460 respectively were made to the Cuddapah and Tanjore Municipal Councils for improvements to water-works. The Ootacamund Municipality took a loan of Rs. 28,540 for the construction of model buildings for the poor ; the Coimbatore Municipality Rs. 12,500 for making advances to the Othechekkars Building Society ; Karur Rs. 12,000 for the construction of High School buildings ; Ongole Rs. 10,000 for the construction of a Municipal Office ; and Anakapalle Rs. 8,000 for the extension of the market. No loans were granted to co-operative societies during the year.

Local Funds

218. The following paragraphs deal with funds raised from special sources and devoted to special objects and not to general purposes of the administration (Imperial and Provincial). The funds comprised under the head " Local Funds " are local funds constituted under Act V of 1884, the Irrigation Cess Fund, Port and Marine Funds, and other funds which are mentioned below seriatim:—

Local Funds Act V of 1884

(1) For information about Local Funds constituted under Act V of 1884, see supra Chapter III, LOCAL BOARDS ADMINISTRATION.

Bhadrāchalam-Nugur Special Fund

(2) The receipts and charges of the Bhadrāchalam-Nugur Special Fund amounted to Rs. 11,529 and Rs. 7,561, respectively, against Rs. 4,263 and Rs. 9,253 in the previous year and the fund closed with a credit balance of Rs. 14,614. The increase under receipts was due to arrear collections relating to the previous fasli.

Irrigation Cess Fund

(3) The Irrigation Cess Fund which exists in the districts of Chingleput, Trichinopoly, Salem, Madura and Coimbatore opened with a balance of Rs. 67,664. The receipts and charges amounted to Rs. 48,965 and Rs. 52,788, respectively, against Rs. 38,422 and Rs. 53,420 in the previous year. The closing balance was Rs. 63,841.

Port and Marine Funds

The Madras Port Fund

The Minor Ports Fund

(4) The Madras Port Fund opened with a balance of Rs. 17,112 and closed with a balance of Rs. 21,762. The income of the fund amounted to Rs. 1,38,074 and its expenditure to Rs. 1,33,424. Government securities of the face value of Rs. 24,200 were purchased by the fund during the year. The Minor Ports Fund opened with a balance of Rs. 81,252 and closed with a balance of Rs. 65,044 ; the receipts and charges amounted to Rs. 3,63,512 and Rs. 3,79,720, respectively. The fund advanced a loan of Rs. 82,881 and Rs. 10,000, respectively, to the Tellicherry and Calicut Landing and Shipping Funds. A sum of Rs. 41,107 in all was repaid towards the principal of the loans taken in previous years by the Madras Coast Lights Fund and the Landing and Shipping Funds of Tuticorin, Negapatam, Cocanada, Cochin, Calicut and Adirāmpatnam. The total security balance of the fund on the 31st March 1920 was Rs. 7,26,700 (face value) exclusive of securities for Rs. 80,000 pledged with the Bank of Madras in 1918–19. The income and expenditure of Pilotage Funds (outports) amounted to Rs. 12,151 and Rs. 13,944, respectively. The opening and closing balances were Rs. 6,665 and Rs. 4,872, respectively. The invested balance at credit of the funds on 31st March 1920 was Rs. 1,80,300 (face value). The opening balance of the Landing and Shipping Funds amounted to Rs. 3,32,630, the receipts and charges to Rs. 4,59,135 and Rs. 4,06,620 and the closing balance to Rs. 3,85,145. The

Pilotage Funds (outports)

Landing and Shipping Funds

invested balance to the credit of the funds was Rs. 4,48,800 (face value). The Madras Coast Lights Fund opened with a balance of Rs. 10,522 and closed with a balance of Rs. 66,322 ; the receipts and charges of the year were Rs. 1,78,207 and Rs. 1,22,407, respectively. The Madras Coast Lights Fund

(5) The receipts and charges of the Cantonment Funds amounted to Rs. 8,25,759 and Rs. 7,38,097, the result being a surplus of Rs. 87,662 which raised the balance from Rs. 31,518 to Rs. 1,19,180. Cantonment Funds

(6) The Cantonment Hospital Fund, Secunderabad, opened with a balance of Rs. 242 and closed with a balance of Rs. 746. The receipts and charges amounted to Rs. 10,267 and Rs. 9,763, respectively. Cantonment Hospital Fund, Secunderabad

(7) The Civil Hospital Fund, Secunderabad, opened with a balance of Rs. 3,890. The receipts and charges amounted to Rs. 92,981 and Rs. 95,427, respectively. *The closing balance was Rs. 1,444.* Civil Hospital Fund, Secunderabad

(8) *The opening and closing balances of the University Fee Fund* were Rs. 1,07,151 and Rs. *41,206, respectively. The receipts and charges* amounted *respectively to Rs. 4,95,991 and Rs. 5,61,936. The invested* balance at credit of the fund was *Rs. 7,96,800 (face value) in Government* securities, Rs. *1,25,000* (face value) in Indian Treasury Bills, and Rs. 1,40,000 in fixed deposits with the Bank of Madras. *University Fee Fund*

(9) The receipts and charges of the Kumbakōnam College Hostel Fund amounted to Rs. 6,994 and Rs. 6,899, respectively, and the cash balance at credit of the fund was raised from Rs. 473 to Rs. 568. Kumbakōnam College Hostel Fund

(10) The opening and closing balances of Mrs. A. V. Narasinga Rao's College Fund were Rs. 14,830 and Rs. *13,730. The receipts and charges* amounted to Rs. *32,504* and Rs. *33,604, respectively. There was an* invested balance of Rs. *1,00,000 (face value) to the credit of the fund at* the close of the year. Mrs. A. V. *Narasinga Rao's College Fund*

(11) The receipts and charges of the Hyderabad Residency Bazaar Fund amounted to Rs. 2,34,672 and Rs. 2,16,408, respectively, and the balance was thus raised from Rs. 1,48,176 to Rs. 1,66,440. Hyderabad Residency Bazaar Fund

(12) The opening balance of the Secunderabad Local (Abkāri) Fund was Rs. 3,21,421. The receipts and expenditure were Rs. 8,66,917 and Rs. 11,20,183, respectively, thus reducing the closing balance to Rs. 68,155. Secunderabad Local (Abkāri) Fund

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MUNICIPAL REVENUES

219. See supra Chapter III, MUNICIPAL ADMINISTRATION—MUFASSAL, and MUNICIPAL ADMINISTRATION—CITY OF MADRAS.

EXCISE ADMINISTRATION

[*Report on the administration of Abkāri Revenue for* 1919–20]

220. The Agency tracts continued to receive special attention in the matter of excise administration. In order to check the excessive drunkenness among the Khonds of the Ganjām Agency, it was decided to attempt to enforce the prohibition of distillation for sale by the appointment of an excise staff and to regulate distillation for general personal consumption and for consumption on public festivals and private ceremonies by a system of licences. A preventive staff was sanctioned for the purpose for a period of two years. The question of improving the excise administration in the Vizagapatam Agency was also under the consideration of Government. In the Gōdāvari Agency, the nominal fee and the outstill systems were abolished with effect from 1st October 1919. Five central distilleries with four wholesale depots were opened in the Nuzur taluk and in the major portion of the Bhadrāchalam taluk for the manufacture and supply **Administrative changes**

to shops of *mahua* arrack of 60° under-proof at a rate of duty of 4 annas per gallon. The contract distillery system was extended to the whole of the Pōlavaram, Chōdavaram and Yellavaram divisions with the exception of 20 villages in Pōlavaram. Free distillation by Koyas was allowed in these villages and in the portions of the Bhadrâchalam taluk not brought under the central distillery system. The whole of this Agency was constituted into a circle and the staff worked directly under the control of the Special Assistant Agents.

Licensing Board and Advisory Committees

221. The Excise Licensing Board appointed for the City of Madras, with power to determine the number and location of shops for the sale of intoxicants of all kinds met four times during the year. It closed seven shops and altered the site of one. Because of their proximity to mills and factories, one arrack shop and five toddy shops were ordered to remain closed on week days from 11-30 a.m. to 1-30 p.m. on the afternoon of pay days and on Sundays except between the hours of 11-30 a.m. and 4 p.m. In addition to the Excise Advisory Committees already existing, committees were formed in 30 unions during the year. They recommended the closure of 72 shops and the change of sites of 134, and their recommendations were given effect to in 59 and 127 cases, respectively. One thousand one hundred and nineteen shops were also closed in municipalities, unions and other areas by Collectors independently of the recommendations of the Committee, either on their own initiative or on complaints of the Police, Land Revenue, Abkāri and other departments or of the Railway authorities and local boards.

Temperance measures

222. The general issue strength of arrack throughout the Presidency remained at 35° under-proof as in the previous year, but the experiment of encouraging the sale of weaker liquor of 60° under-proof was extended during the year by the opening of 53 additional shops in 11 more districts for its exclusive sale with a preferential rate of duty. There were in the Presidency 88 such shops in 18 districts. Arrack at 40° under-proof was supplied to the tracts round Pondicherry and to the Attapadi Valley. Other measures to check intemperance were also continued. An experiment in practical prohibition of arrack in areas where toddy was the chief drink, was on trial in certain areas in the Tanjore, Rāmnād, Tinnevelly and Salem districts. There were isolated temperance propaganda among small sections of the drinking classes. On the representation of a temperance society at Chicacole, two arrack and two toddy shops were closed. Seven arrack shops were temporarily closed for want of bids in the Ellore taluk owing to a local temperance crusade. The licence for the toddy shop at Seelayampatti in the Madura district was revoked during the currency of the lease at the request of the villagers. The renters of arrack and beer shops at Ootacamund were fined Rs. 50 each for breaches of the conditions of their licences as a result of information laid by temperance workers. A temperance society at Vizagapatam known as the "Service League," affiliated to the Anglo-Indian Temperance Association in London, preached in the streets and in the Panchama schools under its control and gave lectures on intemperance. The "Band of Hope" in Tuticorin was organizing tea shops and reading rooms as a counter-attraction to intemperance. The temperance society among the fishermen in Mangalore continued to do good work. A Coolies' Canteen was opened at the Salt Cotaurs Depot in Madras City, with a Government subsidy and was managed by the Young Men's Christian Association. The Educational Department continued to carry out propaganda in the interest of temperance in schools.

Country spirits

223. With the exception of certain Agency tracts, the whole of the Presidency was under the contract distillery supply system. There was no change in the rates of duty on country spirits during the year. The number of shops was reduced from 6,352 to 6,046. The consumption increased during the year by 316,196 proof gallons to 1,988,688 proof gallons and was 0·049 proof gallon per head of the population. The total

revenue from country spirits rose by Rs. 31·77 lakhs to Rs. 220·69 lakhs. The increase occurred under both excise duty and rentals. The proportion of still-head duty to total revenue was 72·2 per cent.

224. There was no change in the rates of tree-tax for 1919–20. The system was extented to certain villages in the Gōdāvari Agency with effect from 1st October 1919 and a reduced rate of tree-tax was introduced in these and the other villages in the Agency already under the tree-tax system. The number of toddy shops was reduced from 11,034 to 10,727. The total revenue under toddy rose from Rs. 215·84 lakhs to Rs. 249·17 lakhs. The increase occurred under both vend rents and tree-tax, the vend rents forming 55·8 per cent of the total revenue. The number of trees tapped expressed in terms of coconuts was 25·21 lakhs as compared with 23·28 lakhs in 1918-19 and the consumption per head rose, roughly, from 2·73 gallons to 2·97 gallons. The sweet juice rules were extended during the year to the Rēpalli and Bāpatla taluks of the Guntūr district. **Toddy**

225. From 1st April 1919, the fee for the retail "off" licences issued on the upper plateau of the Nilgiris was increased from Rs. 400 to Rs. 500. The quantity of foreign liquor imported by sea during the year showed an increase of 48,279 gallons. The quantity of foreign spirits locally manufactured was 27,865 proof gallons, while it was 28,120 in 1918-19. The total issues of beer from the local breweries amounted to 1,323,242 gallons and the imports from Bangalore to 88,844 gallons. Out of the former quantity, 483,416 gallons were exported to places beyond the Presidency. **Foreign liquor**

226. The duty on ganja was increased from Rs. 15 to Rs. 17-8-0 a seer. The contract system of supply of ganja at Vetapalem had to be abandoned, as the results of its working were far from satisfactory. It fostered a tendency on the part of growers and contractors to devote all their attention to quantity at the expense of quality and created discontent among the ryots who could not get favourable terms from the contractors. The quantity of hemp drugs consumed rose from 45,052 seers in 1918-19 to 48,344 seers in 1919-20 and the number of retail licences fell from 413 to 408. The total revenue from hemp drugs was Rs. 15·46 lakhs, while it was Rs. 14·05 lakhs in 1918-19. The average consumption per head of population was 0·092 tola of hemp drugs. The number of licences for possession and sale of cocaine and allied drugs rose from 136 to 142 and the quantity consumed from 68 ounces 394 grains to 71 ounces 251 grains. **Intoxicating drugs**

227. The total abkāri revenue rose from Rs. 220·36 lakhs to Rs. 255·09 lakhs. The incidence of taxation per head of the population was Rs. 1–3–9·8 against Rs. 1–0–11·8 in the previous year. The charges amounted to Rs. 11·27 lakhs in 1919–20 as compared with Rs. 10·52 lakhs in 1918–19. **Finance**

228. The issue price of opium was raised from Rs. 45 to Rs. 50 a seer. The rule requiring opium shop-keepers to record in their account books full details of every sale of opium was found ineffective and was abolished. As the result of the issue of revised rules for the regulation of transactions in morphia and allied drugs and in opium for medicinal purposes, the licences for the former were separated during the year from those for the latter. Both licences were issued free of fee to wholesale dealers in opium and morphia and to chemists. The total issues of opium within the Presidency were 35,648 seers as compared with 36,964 seers in 1918–19. The number of shops fell from 638 to 609. While the cost price of opium creditable to opium revenue was Rs. 13 per seer as in the previous year, the share of the issue price creditable to excise revenue was raised from Rs. 32 to Rs. 37 per seer with effect from 1st April 1919. The revenue credited to "Opium" and the gain on sale-proceeds credited to "Excise" amounted, respectively, to Rs. 6·07 lakhs and Rs. 8·21 lakhs against Rs. 6·03 lakhs and Rs. 7·01 lakhs in the previous year. The amount of shop rentals and miscellaneous revenue **Opium**

credited to "Excise" was Rs. 4·77 lakhs against Rs. 4·85 lakhs in 1918–19. The total opium revenue thus realized by the Excise Department increased from Rs. 17·89 lakhs to Rs. 19·05 lakhs. The incidence of taxation per head of the population was As. 1–0·2 against 9·9 pies in the previous year. The charges amounted to Rs. 692 and were less than those of the previous year by Rs. 268. The licence fees amounted to Rs. 9·44 lakhs as compared with Rs. 9·67 lakhs in 1918–19. The average consumption per head was 0·068 tola of opium.

Offences

229. The number of offences against the Abkāri law rose from 14,973 cases to 15,648 cases. This increase was partly due to improved detection by officers of the department, and partly also to the fact that the extensive closure of shops and the enhanced duty contributed to a real increase in crime. Illicit traffic in opium and ganja continued. During the year several cases of smuggling from Mysore and Bangalore were brought to notice. A certain amount of smuggling by Chinese from Bengal to China via Madras and Singapore was in evidence. Steamers touching Madras were closely watched and many seizures were made.

CHAPTER VI

VITAL STATISTICS AND MEDICAL SERVICES

DETAILS OF CENSUS

230. *Vide* pages 213 to 228 of the Report on the administration of the Madras Presidency for the year 1912–13.

BIRTHS AND DEATHS (1919)

[*The fifty-sixth annual report of the Sanitary Commissioner, Madras, 1919; Report on the working of the Births, Deaths and Marriages Registration Act of* 1886 *in the Madras Presidency during* 1919-20; *Statistics of British India, Vol. III, Public Health—Vital Statistics*]

Population

231. Excluding the Hill tribes of Ganjām and Vizagapatam and the inhabitants of the Laccadive islands and of the Banganapalle and Pudukkōttai States the estimated population of the year was 44,882,056. The actual figure at the end of the year was, however, 43,566,421 or 68,616 less than in the previous year. Emigration was confined to the Straits Settlements, Burma and Ceylon as in the previous year and the number of emigrants exceeded that of the immigrants by 116,109.

Registration of vital statistics

232. Registration of births and deaths was compulsory in much the same area as in the previous year. The total number of births registered in the Presidency was 1,021,213 or 134,991 less than in the previous year giving a birth-rate of 25·5 per mille as against 28·9 per mille for 1918. The recorded birth-rate was less than that of the decennial average by 6·4 per mille. The lowest rates were returned by Nellore and South Arcot. Compared with the decennial average, all the districts without a single exception showed decreased birth-rates, South Arcot showing the largest deficit of 11·1 per mille, and all communities shared it. The birth-rates in compulsory and non-compulsory rural areas were 25·7 and 24·9 per mille as against 29·2 and 28·4 per mille, respectively, in the previous year. In municipalities the birth-rate fell further from 34·4 per mille to 32·5 per mille. Compared with the birth-rate of the rural areas, the rate in municipal towns showed an excess of 7·2 per mille, due probably to better arrangements for the registration of vital statistics. The number of deaths registered during the year fell, by 632,174, to 1,089,829, the death-rate being 15·8 per mille below that of the previous year and 1·9 per mille over that of the decennial average. Here, too, the lowest rates were returned by Nellore and South Arcot. Excepting under "Injuries" a general decrease in the average death-rate of the Presidency occurred during the year under every other head of death causation. Deaths among males were larger during the year than among females, the proportion being 102·1 to 100. Racially considered, the death-rate among Muhammadans was the highest being 33·3 per mille. The infantile death-rate for the districts was 192·9 per mille of registered births against 230·2 per mille in the previous year. The incidence of mortality was the heaviest in Madras as in several previous years. In municipal towns the number of deaths fell, by 30,801, to 109,464 (including the deaths returned by a newly-formed municipality) representing a fall from 50·6 per mille to 39·3 per mille. The total infantile mortality in municipalities averaged 246·2 per mille of the registered births

Births

Deaths

against 282·1 per mille in the previous year, the quinquennial average being 252·0 per mille. The infantile mortality, though lower than in the previous year, still continued to be heavy.

Chief diseases

233. Cholera was prevalent in every district of the Presidency and existed throughout the year in all the districts, except the Ceded districts, the Nilgiris and South Arcot. The total number of deaths from this cause in districts was 93,262 or about 29,000 less than in the previous year representing an annual ratio of 2·3 per mille against 3·0 per mille in 1918. The incidence of mortality throughout the Presidency was heaviest in the months of January and July. The rules issued by Government for combating epidemics of cholera continued to be in operation in all municipal towns and their working was satisfactory. There were few cases in which the local authorities were not prompt in giving effect to these rules immediately after the occurrence of first cases of cholera. Two additional cholera parties were sanctioned during the year bringing the total number of parties at work in the Presidency to eight. The usual measures were adopted by the parties for combating the spread of the disease ; and these were, on the whole, viewed favourably by the people at large. Deaths from smallpox numbered 41,732 or about 17,000 less than in 1918 representing an annual ratio of 1·0 per mille as against 1·5 per mille in the previous year. No district escaped the disease ; and in all of them it was present throughout the year. Of the deaths registered under this head 12,311 were under one year of age and 3,538 from one to ten years of age or 29·5 and 32·4 per cent, respectively, of the total mortality from this cause against 32·3 and 34·2 per cent in 1918. The incidence of mortality was as usual heaviest between January and June. Deaths from plague fell from 12,859 or 0·3 per mille to 5,645 or 0·1 per mille, the quinquennial average being 0·3 per mille. Only four districts were completely free from the disease during the year. Under fevers 403,499 deaths were registered or 492,589 less than in 1918, representing an annual ratio of 10·1 against 22·4 per mille in the previous year. The large falling off in the number of deaths from this cause as compared with 1918 was due to the absence of influenza that was so widely prevalent during the previous year and the consequent low death-rate. The largest number of deaths was recorded in the month of January. The Malaria Board of the Presidency existed only in name, there being no executive officer to work under them. No malaria investigations were therefore undertaken during the year under their direct control nor were anti-malarial measures carried out on a large scale, except in Madras City and Ennore and its surroundings in the Chingleput district. Deaths from dysentery and diarrhœa totalled 74,074 or 5,767 less than in 1918 representing an annual ratio of 1·9 per mille as against 2·0 per mille in the previous year. The largest number of deaths under the head was registered as usual in Madras which had a mortality rate of 11·4 per mille as against 10·9 per mille in the previous year. Mortality from respiratory diseases fell, by 14,215, to 48,984 representing an annual ratio of 1·2 per mille as against 1·6 per mille in the previous year. As in previous years, Madras headed the list with a mortality rate of 10·2 per mille. Deaths from all other causes also fell, by 66,408, to 414,188, the mortality rate being 10·4 per mille as against 12·0 per mille in the previous year.

Cholera

Smallpox

Plague

Fevers

Malaria

Dysentery and diarrhœa

Other diseases

Europeans and Eurasians (1919-20)

234. Amongst Europeans and Eurasians there were 255 births, 109 in Madras City and 146 in the mufassal, and 185 deaths, of which 72 were registered in Madras and 113 in the mufassal. The highest mortality was from fever. Pneumonia, diseases of the heart, diarrhœa and dysentery also claimed many victims. The number of baptisms and burials for which returns were received by the Registrar-General of Births, Deaths and Marriages was 1,202 and 929, respectively, as against 1,311 and 1,123 in the previous year. The number of licences in force under the Indian Christian Marriage Act, 1872, was 734, or four more than in the previous year, and the number of marriages contracted by European Christians rose from 391 to 419.

EMIGRATION AND IMMIGRATION (1919)

[*G.O. No. 941, Revenue (Special), dated the 18th May 1920; Statistics of British India, Vol. IV, Administrative, etc.—Emigration*]

Regulated

235. No indentured emigration took place during the year to the West Indies and Fiji, as the prohibition imposed by Government in 1917 remained in force. One thousand three hundred and sixty-eight emigrants returned from Natal in three ships. There was no emigration to the French Colonies.

Non-regulated

236. The number of passengers to the Straits Settlements increased by 39,055 to 106,509. The increase was due to increased demand for labour on the rubber plantations in the Malay States and to the higher wages obtainable there. The number of passengers to Burma and Ceylon showed, respectively, an increase of 1,378 and 66,249; but it is impossible to distinguish emigrants who go to stay from other passengers who come and go frequently. The increase in the number of passengers to Ceylon was due to the increased rate of wages which the labourers got in Ceylon, to the exemption from the passport rules accorded to the Ceylon passengers and to the facilities for travelling by railway on the Dhanushkodi-Mannar route. The number of persons recorded as having taken passages to ports outside the Presidency but within British India was 11,192 as against 7,481 in the previous year. The great majority of these consisted as usual of passengers from South Kanara to Bombay coast ports. The number of persons who returned from Burma was practically the same. The arrivals from Ceylon increased, by 19,192, to 132,550. This was due to the increase in emigration to that colony and to the abnormal rise in the selling price of rice in Ceylon which at one period led to the return of a number of coolies to their homes in Southern India. In the case of the Straits Settlements the inducements offered induced many of the coolies to remain.

MEDICAL RELIEF (1919)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year* 1919; *Statistics of British India, Vol. III, Public Health—Hospitals*]

Medical institutions

237. The number of medical institutions open to the public at the end of the year was 730, or nine more than in the previous year, of which 40, or two less than in 1918, were for women and children. The State maintained 36 public hospitals, or four more than in the previous year, of which one continued to serve women and children. Local Funds maintained 512 dispensaries, or one less than in 1918, of which 19 were for women and children as against 22 in the previous year. Private agencies maintained 80 institutions, as against 76 in 1918, of which 30, or one more than in the previous year, received State aid, 19 continued to be women and children institutions, four being State-aided. The number of railway hospitals continued to be 47, while the number of State institutions maintained for the benefit of special departments increased from 53 to 55. Two more headquarter hospitals were taken over by Government during the year, as also the Royapetta hospital hitherto maintained by the Corporation of Madras.

Relief.

238. The total number of patients treated in the State-public, Local Fund and private-aided dispensaries was 7,543,567, or much the same number as in the previous year; but the number of in-patients treated rose by nearly 8,900 to 124,050. Of these there were 17,382 patients in the hospitals for women and children, or 1,598 in excess of the previous year's figure. The number of beds available were 3,930 for men and 3,070 for women, an increase of 146 and 58, respectively. The daily average number of in-patients treated was 5,177·91 as against 4,794·64 in the

previous year. The percentage of in-patients returned as cured remained the same as in the previous year, viz., 61·63, and the death-rate fell from 5·90 per cent to 5·66 per cent. There has been a steady decrease in the number of out-patients treated due to the closure of certain dispensaries in the mufassal for want of subordinates. The number of operations performed on 293,610 patients was 297,933, or 11,000 less than in the previous year. The large fall was due to certain kinds of operations having been omitted from the returns. The in-patient operations which need greater skill and better nursing were 34,561 with 792 deaths as against 37,402 with 737 deaths in the previous year. The fall was in some measure due to the increase of private practitioners in Madras and all large towns. The percentage of mortality in in-patient operations increased from 1·97 to 2·29; taking out-patients also into account, it was only 0·28 per cent as against 0·27 per cent in the previous year. The percentage of cures rose from 95·95 to 97·11. The commonest diseases treated vary but little from year to year. The "Other diseases of the skin" form always the largest number. In 1919 they fell, by 71,454, to 1,277,894. Next in frequency come "All other diseases of the digestive system," which rose during the year, by 36,188, to 1,182,241. Eye diseases come next, the number of admissions during 1919 being 506,755, or 78,079 more than in the previous year. Next in order come malaria, injuries, diseases of the generative system and venereal affections. The unpopularity of hospital treatment among patients suffering from infectious diseases continued as before. The number of patients treated for malaria (428,179) went down by 28,395 during the year, but it was still high. The number returned under tubercle of the lungs was 14,212 as against 12,560 in the previous year. As a matter of fact, however, this dire disease was prevalent to a much larger extent and was on the increase in all the larger towns. Hookworm produced a considerable mortality and a much more widespread physical inefficiency and the problem of how to deal with it was engaging attention.

Diseases

Finance

239. The year opened with a cash balance of Rs. 0·32 lakh as against Rs. 0·31 lakh in 1918. Under receipts the Government contributed Rs. 18·20 lakhs, or Rs. 6·08 lakhs more than in the previous year; the contributions from Local Funds increased by Rs. 1·66 lakhs, to Rs. 13·95 lakhs and those from municipalities, by Rs. 0·15 lakh, to Rs. 6·81 lakhs. Public subscriptions on the other hand fell by Rs. 0·56 lakh to Rs. 1·75 lakhs, while under miscellaneous receipts there was a rise by Rs. 0·46 lakh to Rs. 1·96 lakhs. The total receipts thus amounted to Rs. 43·55 lakhs, or Rs. 7·89 lakhs more than in the previous year. The total expenditure which occurred under all the heads increased by Rs. 8·02 lakhs to Rs. 43·38 lakhs. Excluding the expenditure on buildings, diet and investment, the cost per patient treated was As. 6–8 against As. 5–8 in the previous year. The daily average cost for diet for each patient was As. 5–3 as against As. 3–8 in 1918.

Madras Medical College (1919-20)

240. The eighty-fifth session of the Madras Medical College commenced on the 2nd July 1919 and terminated on the 31st March 1920. There were 523 students on the rolls of the institution as against 496 in the previous year. The number of students who were attending the University classes was 341, or 31 more than in the previous year, of whom 21, or four more than in the previous year, were women students. There was a further fall from 50·1 to 48 in the percentage of passes at all the University examinations. At the final examinations 32·8 per cent passed as against 46·9 in the previous year. As compared with the previous year there was a rise in the percentage of failures in medicine, surgery and midwifery. Out of four women students who appeared for the final M.B., B.S. during the year, two qualified for M.B., B.S. and two for L.M.S. In the apothecary department there were 105 students under training, or one more than in the previous year, of whom 26 were women students. Of the 47 women students in the college and apothecary departments 13 were Europeans and Anglo-Indians, 26 were Indian Christians, two were Brahmans and six were non-Brahman Hindus : 42

held Dufferin stipends granted by the Government of Madras, one held the Government European Scholarship and two were stipended by the Cochin State. A dental surgery course was started during the year with four Civil Assistant Surgeons and one senior grade Sub-Assistant Surgeon.

241. There were 1,091 students on the rolls of the Medical Schools, Rayapuram, Tanjore, Vizagapatam, Calicut and Madura, during the year as against 850 in the previous year, of whom private pupils totalled 534 as against 388. For the final Board examinations for the diploma of L.M.P. 181 students appeared from the four Medical Schools, Rayapuram, Tanjore. Vizagapatam and Madura, as against 104 in the previous year, of whom 80, or three more than in the previous year, passed. There were no final year students in the Calicut Medical School. The rapid increase in the number of students seeking admission to medical schools necessitated the enlargement of the Medical School, Rayapuram. Plans and an approximate estimate for Rs. 10½ lakhs for constructing a new medical school to accommodate about 800 pupils on the site of the old Leper Hospital buildings were under scrutiny. One hostel block of 36 rooms in the Medical School, Rayapuram, was completed and occupied during the year. The new medical school buildings at Tanjore were almost completed with the exception of the sanitary fittings and water-supply arrangements. As in the previous year, the passed third year students of Calicut were transferred to Madura for training in their final year of study. The design to which reference was made in the previous year for the proposed Medical School for Women in Madras was still under consideration. A conference of superintendents of medical schools was held in March to consider the question of improving medical education in the schools and their recommendations were under consideration. The receipts of the five medical schools amounted to Rs. 0·36 lakh and the expenditure to Rs. 3·20 lakhs as against Rs. 0·25 lakh and Rs. 2·15 lakhs, respectively, in the previous year. Medical schools (1919-20)

THE PASTEUR INSTITUTE, COONOOR

(1ST MARCH 1919 TO 29TH FEBRUARY 1920)

[*The Annual Report of the Director of the Pasteur Institute of Southern India, Coonoor*, 1920]

242. The number of patients who underwent a full course of treatment during the year was 3,172, or an increase of 347 over the previous year. This increase was entirely among Asiatics. Six patients died during the course of treatment from hydrophobia, and one from septicæmia ; eight died less than fifteen days from the date of completion of treatment, and 24 more than 15 days after the completion of treatment. The last, classed as failures, formed 0·75 per cent, as against 0·74 in the previous year. There were in addition 60 patients, who for various reasons did not complete the full course of treatment. At the close of the year 125 patients remained under treatment. Two hundred and thirty-three persons were given advice but not treated, as they were found to have run no risk of infection. The virus was in its 703rd passage on February 29th, 1920. The net receipts excluding refunds of advances and sales of securities amounted to Rs. 37,458 and the net payments to Rs. 46,522. The expenditure during the year exceeded that of the previous year by Rs. 13,113, and the excess was chiefly due to payments made for stores from Europe and for constructing quarters for indigent patients. The increase in the number of patients which has been progressive from year to year involved additional staff and excess of expenditure over the previous years. Appeals for funds were, therefore, sent to all municipalities and district boards in the Presidency. The majority of the local bodies responded by increasing their annual contribution in proportion to their population.

LUNATIC ASYLUMS (1919)

[*G.O. No.* 245, *Local and Municipal* (*Medical*), *Dated the* 23*rd May* 1920; *Statistics of British India, Vol. III, Public Health—Lunatic Asylums*]

243. There was accommodation for 1,026 insanes in the three asylums at Madras, Calicut and Vizagapatam as against 1,010 in the previous year. The increase was secured by releasing for the use of the inmates of the Asylum in Madras the building in which the office of the Superintendent was located. The total population in all the three asylums at the end of the year was 875 and the daily average strength 906, of which females numbered nearly a fourth. The year's admissions including re-admissions numbered 325 as against 366 in 1918. Three voluntary boarders were admitted during the year, thus bringing the total number of such boarders to six. At the close of the year, however, only two remained. Forty-five criminal insanes were admitted during the year as against 36 in the previous year. Three criminals were discharged to stand trial as against ten in 1918. The daily average sick for the three asylums fell from 99 to 81. The total number of deaths, however, further increased from 119 to 127. The percentage of cured to daily average strength rose from 13·57 to 14·90. Tubercle claimed the largest number of deaths, dysentery coming next. Regular inspections of the asylums were made by both officials and non-officials. The receipts from paying patients showed a considerable increase from Rs. 20,975 to Rs. 25,510. Excluding remittance to the treasury and the value of stores on hand, the total expenditure during the year amounted to Rs. 2·34 lakhs as against Rs. 1·92 lakhs in the previous year.

SANITATION (1919)

[*Annual Reports of the Sanitary Board, Sanitary Commissioner and Sanitary Engineer for* 1919]

Sanitary Board

244. The constitution and functions of the Sanitary Board remained the same as in the previous year, but its powers of final approval were raised from Rs. 20,000 to Rs. 50,000 in respect of the maximum limit of the estimated cost of schemes. During the year the Board recommended to Government a revised programme of major sanitary schemes showing the order of urgency and this was approved. It issued for adoption by local bodies type-designs for flush latrines, for engine drivers' quarters, rat-proof grain godowns and temporary post mortem sheds. It received 13 schemes estimated to cost Rs. 73·98 lakhs, of which nine estimated to cost Rs. 3·92 lakhs were finally examined. The remaining four were after preliminary examination referred to the Chief Engineer, Public Works Department, for technical scrutiny. Eleven of these schemes related to municipalities and two to local boards. The total number of schemes approved by the Board during the year was seven estimated to cost Rs. 3·39 lakhs. Two of these were within its powers of final approval, one of which could not be taken up for execution during the year for want of funds. Five schemes were recommended to Government for sanction, three of which related to town extensions. Of these five schemes one had been completed and two were in progress at the close of the year.

Sanitary Commissioner

Municipalities

245. Two towns, Ellore and Erode, were provided with a piped water-supply during the year, thus bringing the total number of municipal towns which had the benefit of such a system to 29. Ootacamund continued to be the only municipality possessing a completed drainage scheme. The scheme of employing health officers

to supervise sanitation made no progress during the year. Similarly considerable difficulty was experienced in recruiting sanitary inspectors. Although the sanitary staff employed was larger than in the previous year, the inadequacy of both the supervising and menial staff was still apparent among individual municipalities. In most towns the plant employed for the removal of night-soil and rubbish was not only inadequate but was of the most primitive description and much the worse for wear. Some activity was noticeable in providing improved public latrine accommodation of an approved type. The number of insanitary latrines was however still large, but these were being gradually replaced by type-design latrines. There was also an increase, by over 2,660, to about 161,500 in the number of private latrines, of which no less than 89·6 per cent were conserved by municipal agency under the private scavenging system. Municipal councils were however not sufficiently energetic in insisting on private latrine accommodation in houses assessed to the tax on buildings, as over 60 per cent of such houses had not that necessary provision. The conservancy arrangements in vogue were on the usual lines and little progress was made in sewage farming. The aggregate allotment for sanitation for the nine months ending December 1919 was Rs. 32·64 lakhs as against Rs. 29·88 lakhs in the previous year and the expenditure Rs. 22·08 lakhs as against Rs. 20·85 lakhs. Of the total allotment Rs. 4·92 lakhs, or one lakh more than in the previous year, was set apart for the improvement of water-supply. In rural areas no material progress was noticeable in respect of water-supply and drainage, the chief difficulty as usual being lack of funds. Conservancy was no better, as only 2·5 per cent of the number of unions and other villages in the Presidency were conserved. Two District Boards dispensed with the services of their sanitary assistants during the year and subordinates of that class were employed only by two others. The total assignment for sanitation was Rs. 17·75 lakhs as against Rs. 13·07 lakhs in the previous year and the expenditure, which amounted to Rs. 8·12 lakhs, was 45·7 per cent of the allotment as against 50·5 per cent in the previous year. The largest assignment was made for the improvement of water-supply, viz., Rs. 6·63 lakhs, as against Rs. 3·35 lakhs in the previous year.

District boards

246. In addition to the four works mentioned in the previous year, improvements to the water-works at Guntūr were under execution by the Sanitary Engineer. Detailed plans and estimates for eleven water-supply and drainage schemes estimated to cost Rs. 74·36 lakhs were drawn up by him and forwarded to Government for sanction. Plans and estimates submitted by Deputy Sanitary Engineers for four drainage schemes and two water-works were either under scrutiny by the Sanitary Engineer or were returned for revision and four water-supply and three drainage schemes were under preparation by the former. Investigation was completed by Deputy Sanitary Engineers of ten drainage and eight water-supply schemes; and eighteen other schemes, of which sixteen related to water-supply, were still under investigation. Preliminary reports received from Deputy Sanitary Engineers on six other sundry works were under scrutiny. The Sanitary Engineer sanctioned during the year 206 estimates for minor sanitary works aggregating Rs. 17·38 lakhs and forwarded to the Sanitary Board after scrutiny seven estimates aggregating Rs. 2·59 lakhs. The Chief Inspector of Boilers had water-works machinery dismantled and repaired in six municipalities so as to increase their efficiency and attended to the improvements of the pumping and other plant in various other stations.

Sanitary Engineer

VACCINATION (1919–20)

[*Annual Report on Vaccination in the Madras Presidency and on the work of the Vaccine Section of the King Institute of Preventive Medicine, Guindy, for the year* 1919–20; *Statistics of British India, Vol. III, Public Health—Vaccination*]

247. As usual the bulk of the vaccine issued during the year was lanolinated vaccine. Glycerinated lymph was supplied to Madras City and Colombo. The total number of vaccine operations performed decreased further by 20,216 to 1,613,617, the fall occurring under revaccination. The absence of smallpox in most of the districts or its prevalence in a mild form in others was mostly responsible for this decrease. There was an improvement both in quantity and quality in primary as well as secondary vaccinations as compared with the previous year. The increase of 0·3 in the percentage of success under primary vaccination though an improvement over that of last year was still very low. There was a further decline by 5·2 in the percentage of success under revaccination. With a view to investigate the causes of these poor results with lanoline lymph, a series of vaccination experiments were conducted at the King Institute, Guindy. The results showed that the efficiency of vaccine lymph and the percentage of success varied inversely with the period of storage, that chloroformed glycerinated lymph was the best material for use and stood weather conditions much better than either unchloroformed lymph or lanolinated lymph, that unchloroformed lymph, especially the one prepared at the Institute by ordinary hand grinding, was almost as efficacious as the above to start with, but rapidly deteriorated by exposure to atmospheric heat in a tropical climate like that of Madras and that lanolinated lymph even when freshly prepared was only about 60 per cent as efficacious as glycerinated lymph and deteriorated fast by keeping even in the cold store and much more rapidly at atmospheric temperature. There was an increase of 1,925 in the number of children successfully vaccinated under one year of age. The total cost of the department increased from Rs. 4·05 lakhs to Rs. 4·80 lakhs and the average cost of each successful case from As. 6–1 to As. 7–4.

CHAPTER VII

INSTRUCTION

GENERAL SYSTEM OF PUBLIC INSTRUCTION

248. *Vide* pages 213 to 228 of the Report on the administration of the Madras Presidency for the year 1911–12.

EDUCATION (1919–20)

[*Report on Public Instruction in the Madras Presidency for the year 1919–20 ; Statistics of British India, Part VII, Educational*]

Administrative events of the year

249. The Madras Presidency, which has throughout been ahead in girls' education, continued to lead by appointing the first Deputy Directress of Public Instruction temporarily for two years in January 1920. An additional Inspectress's Circle was formed and an additional officer appointed, designated "Chief Inspectress." This reduced to some extent the large areas over which the inspectresses had jurisdiction, and thus enabled them to devote more time to the consideration of the particular educational needs of their respective circles. The Indian Educational Service (for men and women) and the Provincial Educational Service were reorganized with effect from the 1st December 1919. The minimum pay of trained teachers in elementary schools for boys and of women teachers in elementary schools for girls was raised during the year. The system of appropriation of fees by headmasters of elementary schools under public management having no standard higher than the fourth was abolished and to compensate for the loss a personal allowance was sanctioned for all headmasters affected by the abolition. The Government approved the recommendation of the Educational Conference, 1916, that capitation allowances and grants might be abolished in elementary schools, and to compensate the managers of aided elementary schools for the loss on account of the abolition of capitation grants for pupils the teaching grants for teachers in aided elementary schools were raised with effect from 1st April 1919.

General statistics

250. The number of public institutions increased during the year by 1,409 to 34,288 and their strength by 43,000 to 1,626,000, the increases representing 4·3 per cent and 2·7 per cent, respectively, as compared with 1·1 per cent and 0·2 per cent in the previous year. The increase was specially noticeable in the case of elementary schools owing to the opening by local bodies of over 1,000 elementary schools with subsidies paid from public funds. Private institutions, on the other hand, continued to fall in number and in strength. Taking the institutions of all classes and grades together, there was an accession of 1,173 to their number and 37,089 to their strength. The percentage of those under instruction to the whole population was slightly higher than in the previous year, 4·2 against 4·1, the increase occurring entirely in the case of boys, 6·7 against 6·6.

University and collegiate education

251. The Senate's resolutions to lighten the English course for the B.A. Degree examination were approved by Government during the year. The University Professor of Indian History and Archæology was

reappointed for another term of five years, and in order to develop fully the Diploma courses in Economics three posts, one Assistant Professor of Indian Economics and two Readers, were created. In October 1919 the Senate appointed a committee of 44 Fellows to consider and report on the changes desirable in the University Acts and Regulations in view of the recommendations of the Calcutta University Commission. Owing to the opening of the National College, Trichinopoly, the number of arts

Colleges.

colleges increased by one. The Government also sanctioned the affiliation of the Venkatagiri Raja's College, Nellore, in all the groups of the intermediate course. The disaffiliation of the Doveton Protestant College, Madras, was sanctioned during the year on the recommendation of the Senate. The total number of students in all the colleges for men and women was 8,230 as against 7,972 in the previous year. Of these, 6,086, or 27 more than in the previous year, were in first-grade colleges for men: and 2,930 were reading for the intermediate examination. There were in all 391 honours students as against 375 in the previous year. There were 19 second-grade colleges, or one more than in the previous year, and the total number of students reading in them rose by about 200 to 1,900. The three colleges for women continued their steady progress and their strength rose from 208 to 241. The number of women students reading in men's colleges rose from 20 to 29. In the four professional colleges under the control of the department, viz., the Law College, the College of Engineering, the Teachers' College, Saidapet, and the Training College, Rajahmundry, the strength fell from 1,339 to 1,292.

Secondary education

252 The number of public secondary schools for Indian boys rose from 418 to 427, of which 215 were high schools as against 203 in the previous year. The total strength of all these schools rose by 5,645 to 148,922, the percentage of increase being 3·9 as against 2·1 in the previous year. Of this number 1,773 were girls as against 1,618. The number of teachers employed advanced from 6,380 to 6,576, or by 3·1 per cent as against 9·4 per cent in the previous year. There was a further increase in the number of candidates for the public examination under the Secondary School Leaving Certificate Scheme. The total direct expenditure on secondary schools for Indian boys increased by Rs. 3½ lakhs to Rs. 45½ lakhs, to which public funds contributed 16 per cent, fees 71 per cent and other sources 13 per cent, the corresponding percentages for the previous year being 13, 72 and 15, respectively. The average cost of educating each pupil was Rs. 30·1 as against Rs. 29·2 and each pupil paid an average fee of Rs. 22 or one rupee more than in the previous year.

Elementary education

253. The number of public elementary schools for Indian boys increased by 1,051, or 3·5 per cent, to 30,989 and their strength by 19,087, or 1·5 per cent, to 1,269,013. The percentage of male pupils to the male population rose slightly from 5·3 to 5·4. There was a decrease in the number of aided schools which was mainly due to the continuance of the policy of taking them over under public management for various reasons. The total number of teachers employed in public schools increased by 2,622, or 5·1 per cent, to 53,902 and the number of trained teachers by 1,074, or 5·8 per cent, to 19,409. The percentage of trained teachers to the total number of teachers employed remained the same as in the previous year, viz., 36. During the year 543 buildings were constructed for the accommodation of public elementary schools for boys. The total expenditure rose from Rs. 66 lakhs to Rs. 74 lakhs, towards which the percentages of contributions from public funds, fees and other sources remained the same as in the previous year, viz., 74, 10 and 16, respectively. A sum of nearly Rs. 4½ lakhs was placed at the disposal of local bodies for the construction of elementary school buildings. The average cost per pupil rose further from Rs. 5-9-0 to Rs. 5-15-3.

Special education

Training school

254. The number of Government training schools for masters rose from 47 to 55, but their strength fell from 4,554 to 4,251. The number of training schools for mistresses rose from 24 to 26 and their strength from 925 to 1,127. There were 5,565 students receiving education of a technical

character as compared with 4,699 in the previous year. Of these, 1,283 were pursuing art education, 998 technical education in engineering subjects and telegraphy, 1,637 industrial education, including agriculture and 1,647 commercial education. Technical and industrial schools

255. The total number of schools solely intended for Indian girls rose from 2,277 to 2,563 and their strength by 13,621 or 3·9 per cent to 360,743. The number of public secondary schools for girls rose by 4 to 44 and their strength by 1,213 or 17·7 per cent to 8,082. The number of girls in secondary schools for boys was 1,773 as against 1,618 in the previous year, or a slight increase of 155, thus making a grand total of 9,420 girls receiving secondary education. The number of public elementary schools for girls rose, by 319, to 2,367, and their strength, by 13,499 or 9·5 per cent, to 155,289. As many as 728 women underwent higher elementary training, while 336 attended the lower elementary course. The results of the examinations both for the elementary and secondary grades, respectively, during 1918–19 were distinctly gratifying as 88 per cent, 72 per cent and 63 per cent of those presented for the secondary, elementary higher and elementary lower grades passed the Training School-Leaving Certificate examination. There was an increase of Rs. 3·5 lakhs in the total expenditure on girls' schools as against Rs. 2·3 lakhs in the previous year. To this additional cost, public funds contributed 70 per cent, and fees and other sources 30 per cent. **Female education**

256. The total number of European institutions remained the same as in the previous year, viz., 92, but one of the two industrial schools previously under the Director of Industries was transferred to the control of the department during the year. The total strength rose, by 221, to 9,106, and the total number of teachers, by 18, to 693. Of the latter 508 held professional certificates as against 501 in the previous year. More than 50 per cent of the candidates were successful in the Middle School examination while in the High School examination the percentage of passes was 42 for both boys and girls and in the Primary Scholarship examination 38 and 23 for boys and girls, respectively. English and Mathematics accounted for the large majority of failures in the High School examination. The total expenditure fell by Rs. 0·93 lakh to Rs. 16·68 lakhs. The decrease was mainly due to the surrender of a part of the building grant allotment, and the utilization of a further part of it for other purposes by re-appropriation. Towards the total expenditure, public funds contributed 35 per cent, fees 18 per cent and other sources 47 per cent, the corresponding percentages in the previous year being 40, 14 and 46, respectively. **European education**

257. The number of public institutions chiefly intended for Muhammadans rose, by 133, to 1,983, and their strength, by 7,821, to 118,434. This was chiefly due to the increase in the number of public elementary schools for boys and girls. One aided secondary school was taken over by Government during the year: and a training school for masters and another for mistresses were opened. Of the public schools intended for Muhammadans, 214, or 25 more than in the previous year, were elementary schools for girls attended by 11,583 pupils or 556 more than in 1918–19. In the eight training schools for masters and the three for mistresses, 322 and 63 students, respectively, were under training towards the close of the year showing an increase of 28 masters and 24 mistresses. In Arts colleges there were 162 Muhammadan students, or eight less than in the previous year, while the number of Muhammadan pupils in secondary schools for Indians rose, by 391, to 7,973. The total number of public schools intended for Mappillas rose from 534 to 558. The expenditure on Muhammadan and Mappilla schools rose from Rs. 9·66 lakhs to Rs. 9·91 lakhs, towards which public funds contributed 73 per cent, fees 7 per cent, and other sources 20 per cent, the corresponding percentages for the previous year being 72, 7 and 21, respectively. **Education of Muhammadans**

258. The number of public institutions chiefly intended for Panchamas rose, by 480, to 6,438, and their strength, by 9,776, to 174,782. The total **Education of backward classes and others**

Panchamas

number of Panchama scholars in public schools in the different stages of instruction rose by 3,805 boys and 2,206 girls. The increase was particularly noticeable in elementary schools for boys and girls and in training schools for masters.

Aboriginal and hill tribes

The number of schools chiefly intended for aboriginal and hill tribes in the Ganjām, Vizagapatam and Gōdāvari Agencies decreased from 289 to 276, but the strength in them increased from 9,813 to 10,332. Of this number, 4,626 belonged to hill tribes. In the three Agencies the total number of aboriginal pupils in all classes of schools rose from 6,127 to 6,259. There were 13 Government schools exclusively working for the benefit of the Chenchus in the Kurnool district, 50 institutions chiefly intended for the aboriginal and hill tribes in the Nilgiris and 3 schools for Saliyas and other backward classes in the Malabar district. In the Presidency, as a whole, the total number of pupils belonging to the aboriginal classes was 9,096 (8,186 boys and 910 girls) as against 8,755 (7,774 boys and 981 girls) in the previous year. The scholarships and fee remissions sanctioned by Government for the benefit of Panchamas and other boys belonging to the aboriginal and criminal tribes studying in secondary schools were fully utilized.

Blind and deaf mutes

The institutions for blind and deaf mutes at Palamcottah, Mylapore and Rentachintala continued to do good work.

Finance

259. The total expenditure on education rose from Rs. 248 lakhs to Rs. 266·69 lakhs, representing an increase of 7½ per cent as against 10 per cent in the previous year. To this increase public funds contributed 55 per cent and private funds 45 per cent as against 53 and 47, respectively, in 1918–19. The total direct expenditure rose, by over Rs. 20 lakhs, to Rs. 192·8 lakhs, while indirect expenditure decreased from Rs. 76 lakhs to Rs. 74 lakhs. The fall was chiefly due to the low expenditure under "Buildings." There was, however, additional expenditure amounting to Rs. 3 lakhs on hostels (boarding charges). The recurring Imperial assignments aggregating Rs. 27·20 lakhs which were available during the year were almost entirely spent. A further recurring grant of Rs. 0·50 lakh (Rs. 0·25 lakh for the reorganization of the College of Engineering, Guindy, and Rs. 0·25 lakh for the opening of agricultural middle schools) was made available. The grant relating to the former was fully utilized for equipment. There was no expenditure under the latter head as the scheme did not mature. Out of the unspent balance in the Imperial non-recurring grant of Rs. 49 lakhs made in 1912–13 for education in general, a sum of Rs. 0·91 lakh was spent on Government educational buildings.

REFORMATORY SCHOOL, CHINGLEPUT (1919)

[*Statistics of British India, Part VI, Administrative and Judicial—Jails*]

260. The average strength of the Reformatory School, Chingleput, including eight boys under licence, was 247 as against 258 in the previous year. Seventy-six pupils, or two more than in the previous year, were admitted, of whom 45 were casual offenders without proper guardians, 25 had one previous conviction, 5 had two previous convictions and one three previous convictions. Fifty-five boys were discharged after their due periods of detention. There were six cases of boys specially discharged, two on appeal, two on account of overage and two owing to contagious diseases under the orders of Government. There were nine escapes during the year, of whom five were recaptured. The sanitation of the school and its premises was carefully attended to but the general health of the boys was however not quite satisfactory and this was partly due to the fact that they came mostly from the poorer classes and were not properly cared for in their younger days. Two hundred and thirty boys were treated as in-patients in the hospital as against 454 in the previous year. The conduct of the boys was generally satisfactory. The monitorial system, though helpful in maintaining discipline

was found to have some defects. The number of monitors was therefore reduced to a minimum. The total earnings of the boys during the year was Rs. 1,139 or much the same as in the previous year. Religious and moral instruction continued to be imparted in the school on the usual lines. Considerable attention was paid to physical training and recreation. Fourteen boys were sent up for the Elementary School-leaving Certificate examination of whom 13 secured "good" certificates and one a "fair" certificate. For the Government Technical examinations 29 candidates in all appeared, 23 for the Elementary and 6 for the Intermediate, and 14 passed. Considering the number of boys in the several sections of the industrial classes the number sent up for the examination was small. The supervision and after-care of discharged pupils received as usual the attention of the authorities. There were eight boys under licence at the beginning of the year, two were returned from licence during the year and sixteen boys were sent out on licence, the majority of them to the Military Department. Deducting the sale-proceeds, the net expenditure was Rs. 0·50 lakh as against Rs. 0·47 lakh in the previous year.

MISCELLANEOUS (1919–20)

261. With the exception of the examination for the recruitment of candidates for the Madras-Burma Sub-Assistant Surgeon grade, all the usual examinations were held during the year. The special examination under the Secondary School-leaving Certificate Board for the benefit of teachers who failed in the Matriculation or the Upper Secondary examination and were desirous of being admitted for secondary grade training was held at 44 centres. Sixty-nine candidates including two women appeared. The Training School-leaving Certificate examination was held in 68 centres: 869 candidates appeared for the secondary grade, 1,464 for the elementary higher and 2,171 for the elementary lower. The number of successful candidates in the three grades were 565, 883 and 1,253, respectively. Eighty-eight candidates registered their names for the public examination at the end of the advanced course of studies in Sanskrit, which was held in eight centres. Thirty-seven became eligible for admission to the University course of study for the Siromani title, three for admission to the course for the Vidvan title and four for admission to either course. The total number of individual candidates registered for the three grades of technical examinations was 10,163 as against 10,429 in 1918. The total number of subject candidates examined was 11,827 of whom 5,408 were successful. Five of the subject candidates for the advanced, 143 for the intermediate and 362 for the elementary grade were women, of whom 3, 81 and 188, respectively, were successful. For the 100 vacancies thrown open to competition for the grade of Civil Medical pupil, 498 candidates presented themselves, almost all of whom were holders of secondary school-leaving certificates. There were twenty vacancies for the grade of Indian Military pupil and 36 candidates, all holders of secondary school-leaving certificates, applied for admission to the competitive examination for that grade. Two further changes in the scheme of the Special Test examinations were given effect to during the year, namely, the abolition of the distinction between the higher and lower grades in the Translation Test examinations and their replacement by a single test, and the reduction in the number of subjects for the Civil Judicial Test from six to three. For the several tests 2,919 candidates in all registered their names, 2,270 presented themselves for examination and 1,301 passed. The percentage of passed candidates to those examined slightly increased from 57·05 to 57·31. The receipts amounted to Rs. 2·16 lakhs and the expenditure to Rs. 1·98 lakhs.

Government examinations

Special tests

Finance

262. The number (465) of pupils on the rolls of the Lawrence Memorial School and the number (27) of day scholars remained about the same as in the previous year. There were 286 children awaiting admission

Lawrence Memorial School (1919)

(154 boys and 132 girls), of whom 229 were children of British officers and soldiers who were serving or had served in India; 53 of these were orphans. The results of the public examination held in November 1919 were satisfactory. The Inspector of European and Training Schools visited the school in May-June 1919 and recorded the opinion that its general condition and tone continued to be very good, that it was in a flourishing condition and that with the further improvements contemplated its efficiency would be increased. Their Excellencies the Governor and Lady Willingdon and His Excellency the Commander-in-Chief in India visited the institution during the year. Including the opening balance of the previous year, the receipts amounted to Rs. 3·33 lakhs and the expenditure to Rs. 2·65 lakhs.

Finance

School of Arts, Madras

263. The number of pupils on the rolls of the Madras School of Arts on the 31st March 1920 was 222, or 50 less than in the previous year, of whom 22 were females. The average attendance during the year was 154. The decline in strength was due to the continued prevalence of epidemics and famine during the year. After a few months' training the pupils were able to get daily wages of three to four annas in any business and the costliness of living tempted many parents to withdraw their children from the school in order that they may supplement the family income by their earnings. The percentage of artisan pupils increased from 51·1 to 65·5. The number of scholarships tenable in the school and the work done by the various classes was much the same as in the previous year. Sixty-one new books were added to the school library during the year. The museum was maintained in good order. One hundred and sixty-eight pupils went up for the technical examinations, of whom 134 were successful.

LITERARY SOCIETIES

264. *Vide* pages 239 to 241 of the Report on the administration of the Madras Presidency for the year 1911–12.

LITERATURE AND THE PRESS (1919–20)

[*Statistics of British India, Vol. IV, Administrative, etc.—Press and Publications*]

Public libraries

Connemara Public Library

University Library

The Oriental Manuscripts Library

265. The total number of readers during the year at the Connemara Public Library was 19,747, or about 300 more than in the previous year. The number of standard works added to the library was 350, or 69 less than in the previous year, of which 282 were purchased and the rest presented. Very good use was made of the library during the year, the total volumes consulted (72,588 as against 30,603) having been the highest on record. At the University Library there was a further rise by about 100 to 10,500, in the total number of readers, but the number of volumes consulted fell, by 175, to 15,347. There was a slight rise, by 18, to 229 in the number of readers who claimed the privilege of taking books on loan against a deposit of Rs. 20 and the number of volumes consulted by them increased from 4,893 to 5,030. The number of manuscripts acquired or copied for the Oriental Manuscripts Library was 636, or 191 more than in the previous year. The temporary search party organized in 1914 for acquiring manuscripts in private hands continued to work in two sections, one in Malabar and the other in the Northern Circars. The number of visitors to the library increased, by 465, to 2,218, and the number of books consulted, by 621, to 4,115.

The Madras Record Office

266. The collection of records relating to the old Coast Army which was received from the Imperial Record Office in the previous year was amalgamated with other available records on the subject belonging to the old Military Secretariat. All surviving records of the old Madras Army have thus been brought together and have been catalogued. A consolidated catalogue of the District records was passing through the press and the printing of the Calendar of the Madras Despatches, 1743–44 to 1753–54, was completed. The latter was awaiting the preparation of an introduction. The publications issued during the year were (1) Records of Fort St. George, Public Consultations, 1695, Letters to Fort St. George, 1686–87 and 1693–94, and Letters from Fort St. George, 1697 and 1699 ; (2) Baramahal Records—the Volume on Imposts ; and (3) The Diary of Ananda Ranga Pillai, Volume VII. There were four applications for the examination of papers relating to the history of (1) the 26th Light Cavalry, (2) the Banqueting Hall, Pulicat and Gingee, (3) Mysore, and (4) Rāmnād. In the first case the applicant was throughout the year engaged in collecting information. The other applications were also complied with.

Periodicals (1919)

267. There were 223 newspapers in existence at the end of 1919 as against 199 at the close of the previous year. The circulation of the *Hindu* rose from 7,200 to 9,700 while that of *New India* fell from 9,000 to 4,200. The *Madras Times* owing to general improvement in management and a reduction in price was able to increase its circulation, by 4,500, to 8,000. The tone of the press during the year showed no signs of improvement. Owing to the demand of security three printing presses did not open and seven newspapers did not begin publication. There were two cases of forfeiture of security ; enhanced security was demanded and deposited in the one case and in the other case no application was made for a fresh declaration, and the publication of the newspaper ceased. There were six proscriptions under section 12 of the Indian Press Act, 1910. The Government took up for consideration during the year the question of the possibility of making less use of the Press Act and the substitution of a policy of counter-propaganda and a Publicity Bureau was established in July and has been doing good work. An inquiry was also started with the object of seeing whether it was not possible to relax the orders of security imposed in 1919 and in previous years so that a fresh start might be made. The Royal Proclamation of 24th December 1919 gave an opportunity, and consistently with the spirit of that proclamation all papers and presses that had been called on to deposit security under sections 3 and 8 of the Press Act were, on the advice of the Government, released from security in the early part of 1920.

Registration of books (1919)

268. There was an increase in the volume of the year's literary activity in respect to books, the number registered rising by 150 to 2,549. The number of periodicals registered fell, by 16, to 674 although the number (1,921) of separate issues comprised in these exceeded the corresponding figure of the previous year by 64. There was a further rise in the number of English publications but a fall in that of original works published in the vernaculars, in Indian classical languages and in more than one language. The largest number of publications was as usual in Tamil and there was a further decline in the number of Telugu publications. There was a noticeable increase in productions of a purely educational nature which formed 18 per cent of the total literary output. Two publications, one in Tamil and the other in Telugu, deserve mention. "Karnarpadu," a pastoral poem of the *sangam* period published many years ago with an incomplete commentary, was republished during the year with a complete commentary. The editor has in the preface reviewed the work of the three *sangams* of Madura and has also given a brief exposition of the erotic sentiment which Tamil poems of the classical era give expression to. The Telugu play "Padmavyuhamu," which describes the thirteenth-day battle of the Mahabharata war, is remarkable for its forcible and perspicuous style. The author decries the fascination for foreign customs and habits and condemns foreign modes

of dressing and living as denationalizing. The moral tone of the publications continued to be generally satisfactory.

ARTS AND SCIENCES (1919–20)

Government Museum

Visitors

Buildings

Demonstrations

Archæology and art

Numismatics

Economic and botanical

269. The total number of visitors to the museum increased by nearly 220,000 to 732,250. Excluding two Hindu festival days, which usually attract a large number of visitors, the attendance during the year exceeded the previous year's figure by over 90,000 and was nearly 27,500 over and above the average for the preceding five years. The extension to the south wing of the old building for providing additional accommodation to the Natural History section was approaching completion and the reflooring of the stuffing room block was completed. A flagstaff was erected in the compound in front of the new building. The usual demonstrations to pupils and teachers in Madras schools were given during the year : but there was a further fall in the attendance at these demonstrations. A number of wood-carvings which have long been stored in the temporary shed were examined during the year and the best of them were selected and cleaned for exhibition. Some interesting sculptures and a very large number of copper-plate grants were acquired for the museum during the year. Among the latter mention may be made of a set of 31 plates (the highest on record) found in an underground chamber in the temple of Tiruvelangadu, Chittoor district. They record the gift to that temple of a village by Rajendra Chola I and contain also valuable information about the Chola genealogy and the history of different Chola Kings. The manuscript of a catalogue of the coins of Haidar Ali and Tipu Sultan was passing through the press during the year and arrangements were being made for the preparation of the necessary plates. In both the economic and botanical galleries a large number of old labels were replaced and an attempt was being made to give the names of specimens in the four Dravidian languages and also in Hindi.

Metsorology

270. As in previous years, the chief work of the Madras Meteorological Office was the publication of the Madras Daily Weather Report, and the publication of the Presidency rainfall tables. Of the 25 observatories which were under the Meteorologist, Madras, all except those at Anantapur, Guntūr, Koraput and Vellore were, during the year, taken under the immediate control of the Director-General of Observatories, Simla. The Madras Daily Weather Report was issued to 56 Government and other officials in Madras, 100 in the mufassal and 22 paying subscribers. Excluding Meteorological Observatories there were on the 31st March 1919, 495 rain recording stations furnishing rainfall reports for publication in the *Fort St. George Gazette*. The rain gauges at the Taluk office, Vizagapatam, and at the Variyur Salt Factory in Travancore were closed during the year, so that there were 493 rain recording stations on the 31st March 1920. Of these 393 are in the Madras Presidency and 391 or nearly 99·5 per cent were inspected during the year. The system of inspecting rain gauges was set on foot in Travancore in December 1918 and all the stations have been inspected since. The expenditure of the Madras Meteorological Office during the year was Rs. 9,978–0–7.

Astronomy (1919)

Kodaikānal Observatory

271. At Kodaikānal the record of solar activity was maintained as in former years. Spectroheliograms of the sun's disc in calcium light were obtained on 329 days and of prominences at the limb on 248 days. Photographs of the disc in hydrogen light were secured on 257 days, and direct solar photographs on a scale of 8 inches to the diameter on 333 days. Compared with the previous year there was a general decrease in spot activity amounting to 29 per cent in the case of new groups. The decrease was much greater for the northern hemisphere than for the southern and there resulted a considerable preponderance of activity in the south. The approximate mean latitude of the spots was 10·4° in the northern and 12·5° in the southern hemisphere, a decline of 1·4° and 2·1° respectively

as compared with the figures for 1918. There was a slight decrease in prominence areas and a considerable reduction in numbers. The large grating spectrograph was employed in investigating the variability of the wavelengths of arc and solar lines, the displacements of solar lines in relation to Einstein's prediction and the displacements in the Venus spectrum. A continuous registration of earthquake disturbances was made by a Milne seismograph and 90 earthquakes were recorded during the year. Twenty-six "great" and 176 "moderate" magnetic storms were registered in the Magnetic Observatory during the year. At Madras the only astronomical observations made were those for the maintenance of an accurate time service for the whole of India. The time gun at Fort St. George failed on eleven occasions out of 731, giving a percentage of success of 98·5. Of these failures one was due to a fault at the Observatory. The gun was fired at 8 a.m. and 11 a.m. instead of at 12 noon on November 11 on account of the anniversary of the Armistice. The time ball at the Harbour failed altogether on one day. On four other days it failed at 1 p.m. but dropped correctly at 2 p.m. The 4 p.m. roll of signals was sent to the Central Telegraph office on every day and was received there correctly.

Madras Observatory

CHAPTER VIII

ARCHÆOLOGY AND EPIGRAPHY (1919-20)

[*Annual Report of the Archæological Department, Southern Circle, Madras, for the year* 1919-20. *Progress Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year* 1919-20]

Archæology

272. Five new monuments were added to the standard list of ancient monuments, and one was deleted from the list during the year. One hundred and forty-five photo negatives were prepared illustrative of ancient art and architecture. Eighteen applications for photographs were received from the public and 300 were supplied. The only case of treasure trove of real importance brought to notice during the year was from a village in the Nannilam taluk, Tanjore district. The finds consisted of fourteen small metal images of Hindu deities and fifteen *puja* utensils of which twelve of the former and two of the latter were acquired for the Madras Museum. Twelve new drawings, mostly plans and sections, were prepared during the year to serve as illustrations for the Superintendent's special work on South Indian Architecture. In order to collect material for that work, the first portion of which deals with Pallava architecture, the Superintendent inspected certain Pallava monuments in Chingleput, South Arcot, Kistna and Guntūr districts. The oldest and most interesting of these are the small rock-cut Hindu temples excavated in the eastern face of the Indrakila hill at Bezwada and those in the neighbouring modern hamlet of Mogalrajapuram. There are also similar remains at Undavalli on the south side of the Kistna river, the large rock-cut temple being of particular value and interest. The origin of these monuments which are cut out of the natural rock instead of being built with brick and mortar is shrouded in obscurity. They are probably the first attempts of the Pallavas at a style of architecture which became famous under their King Mahendravarman I who introduced it into the Tamil country after they were driven south by the Chalukyas in the early part of the seventh century A.D. A preliminary excavation of the Buddhist remains at Salihur dam on the south bank of the Vamsadhara river in the Chicacole taluk of the Ganjām district was undertaken during February and March 1920 with a view to its future excavation and survey. These consist of ruins of brick buildings and stupas on the summit and eastern slope of one of two hills and a number of very interesting sculptures in the village, all belonging to the later Buddhist period. The ruined monuments cannot be later than 700 A.D. and probably are very much earlier, while the stone images, which belong to the Mahayana school of Buddhism and represent the last stage of that religion in Southern India, may be attributed to the ninth century A.D. The allotment for the year was Rs. 33,000 as against Rs. 25,000 in the previous year and the expenditure amounted to Rs. 37,820 as against Rs. 19,887. The excess expenditure was due to the execution of urgent repairs to the roads and pathways at the Seven Pagodas in anticipation of His Excellency the Viceroy's proposed visit to Mahabalipuram in November and of special repairs to the palaces at Chandragiri. The establishment charges amounted to Rs. 20,745 as against Rs. 19,471 in the previous year.

Epigraphy

273. The Assistant Superintendent was on tour in the Guntūr and Gōdāvari districts for nearly three months—January to April 1920—in

connexion particularly with publication work. Bhadrāchalam, the well-known place of pilgrimage on the Upper Gōdāvari, was one of the places visited in the hope that it would yield interesting documentary finds of the time of Gopanna Ramdas (a nephew of the famous Golconda ministers Akkanna and Madanna of the seventeenth century A.D.) whose unswerving piety and devotion as recorded in popular legend and song have lent added celebrity to the place. The visit was devoid of any discovery worth the name. This disappointment was, however, more than compensated for by the discovery of about twelve new inscriptions at Pattisam and Mahanandi, two island temples picturesquely situated on the bed of the Gōdāvari near Polavaram. These records belong to the period between the twelfth and fifteenth centuries A.D. and bring to light the name of a fresh dynasty of Kings of the Malias (Malaya-Mandala). More than a month and a half was spent at Simhāchalam where imperfect transcripts of 125 inscriptions made in the past were checked with the original stones and completed and 363 fresh inscriptions were discovered, copied and transcribed. The activities of the Assistants in the search for and the collection of fresh epigraphical material were satisfactory. The talukwar survey of Ālūr (Bellary district), Dhārāpuram (Coimbatore district) and Tenali (Guntūr district) was finished. About 150 villages in all (excepting those of the Tenali taluk) were visited and, including the Simhāchalam inscriptions referred to above, 1,084 fresh inscriptions, the highest on record, were copied and transcribed. Part III of Volume III of *South Indian Inscriptions* was issued during the year and some progress was made with Volumes IV and V. Fourteen copper-plate inscriptions which are interesting and valuable from a historical point of view were examined during the year. The photographer toured for more than two months in the Madura and Tinnevelly districts and the Pudukkōttai State taking photographs of all the natural caverns with Brahmi inscriptions so far discovered and noting down full particulars about them. Many records of the time of the early and medieval Cholas were secured during the year from the ancient Siva temples of Tiruvarur in the Tanjore district and Tirumalavādi in the Trichinopoly district. The temple of Airavatēsvara at Darasuram near Kumbakōnam which was constructed by Kulottunga III contains a belt of sculptures representing scenes from the lives of the Saiva devotees as related in the *Periyapuranam*. Sketches of these scenic representations of the thirteenth century were reproduced during the year and detailed descriptions were published. Dhārāpuram, which is believed to be the Virātapuram of the *Mahabharata* and which is claimed to have been the *quondam* capital of the Kings of Kongu for some time, yielded 108 inscriptions, but these have not helped to dispel the obscurity in which the history of these Kings is enveloped with their puzzling maze of Chola and Pandiya names. At Conjeeveram, the queen-city of the south which has passed through many vicissitudes, over 300 inscriptions were copied in the Varadarajaswamin temple. More than 50 per cent belong to the Vijayanagara Kings and a pretty fair proportion are records of the later Cholas and their feudatories Gandagopala and Vijayagandagopala. The former, though not important from a historical point of view, are of interest as containing references to influential Srivaishnava families which survive to the present day such as the Tatacharyas and those bearing the distinguishing prefixes of "Kandadai" and "Paravastu." In some of the inscriptions mention is made of one Ettur Tirumalai Kumara Tatacharya, the manager-general of temple affairs in the time of Venkatapati I, who lived in kingly splendour, made many valuable gifts to the temple, founded *agraharas* and dug the tank Tatasamudram now known as Ayyankulam. The expenditure of the department during the year amounted to Rs. 26,427, or about Rs. 500 less than in the previous year.

CHAPTER IX

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

274. *Vide* pages 244 to 246 of the Report on the administration of the Madras Presidency for the year 1911-12.

ECCLESIASTICAL (1919-20)

Church of England

275. The Bishop of Madras continued to exercise episcopal jurisdiction and functions relating to the see of Calcutta and the Metropolital office till 31st July 1919, when he made over charge of the diocese to the new Metropolitan, the Most Reverend F. Westcott, D.D. He went on furlough for six months on the 2nd March 1920. His Commissary, the Venerable the Archdeacon of Madras, took charge of the diocese on the afternoon of the 1st March 1920. The Bishop was summoned by the Government of India, Army department, to Delhi in February to give evidence as a representative of the Bishops in India before Lord Esher's Commission, and by the Metropolitan to Calcutta also in February on provincial business. On the 31st March 1920 there were in all 290 clerks in Holy Orders officiating under the licence of the Bishop of Madras, including 119 who were officiating in the revenue districts of Tinnevelly and Madura which are under the episcopal charge of the Bishop in Tinnevelly and Madura. Seven chaplains were granted leave out of India during the course of the year. One senior chaplain died in October and another retired in November. The former vacancy was filled up while the latter remained unfilled during the year. The services of a junior chaplain were placed at the disposal of the Government of India in the Army department and he left the diocese early in March, and one Indian clergyman was absent from the diocese on service in Mesopotamia throughout the year. During the year the Bishop in Tinnevelly and Madura ordained fifteen Indian deacons and nine Indian priests, while the Bishop of Dornakal ordained on behalf of the Bishop of Madras two deacons and seven priests, all of whom were Indians. Ten clergymen received licences to officiate in the diocese of Madras either as chaplains, missionaries or Indian pastors. Fourteen licences were issued by the Bishop in Tinnevelly and Madura. The new railway church at Podanur was dedicated by the Bishop of Madras on 23rd July 1919, and the additional portion of the burial ground at Coimbatore was consecrated on the 7th October 1919. Alms and other devotions of the people offered through clergymen ministering to English congregations during the year amounted to Rs. 1·70 lakhs.

Voluntary contributions

STATIONERY (1919-20)

Stationery

276. The value of the stock with the Superintendent of Stationery at the beginning of the year was Rs. 15·30 lakhs (English stores Rs. 5·3 lakhs and Indian stores Rs. 9·96 lakhs) as against Rs. 10·59 lakhs (English stores Rs. 4·93 lakhs and Indian stores Rs. 5·66 lakhs) in 1918–19. The increase was due to the abnormal rise in the price of articles of both European and Indian manufacture. The total value of stores received during the year amounted to Rs. 6·22 lakhs (English stores Rs. 2·14 lakhs and Indian stores Rs. 4·07 lakhs) as against Rs. 13·79 lakhs (English stores Rs. 3·07 lakhs and Indian stores Rs. 10·71 lakhs) in 1918–19. The total value of issues amounted to Rs. 13·80 lakhs (English stores Rs. 4·59 lakhs and Indian stores Rs. 9·22 lakhs) as against Rs. 9·08 lakhs (English stores Rs. 2·66 lakhs and Indian stores Rs. 6·42 lakhs) in the previous year. The value of stationery debited to Local and other funds and of stationery issued on payment amounted to Rs. 0·31 lakh as against Rs. 0·39 lakh in 1918–19. The value of the closing balance of stores for the year was Rs. 7·71 lakhs (English stores Rs. 2·90 lakhs and Indian stores Rs. 4·82 lakhs) as against Rs. 15·3 lakhs (English stores Rs. 5·34 lakhs and Indian stores Rs. 9·96 lakhs) in 1918–19. The decrease was due to the increase under issues and the fall in receipts.

THE GOVERNMENT PRESS (1919–20)

Finance

277. The total receipts amounted to Rs. 1·02 lakhs against Rs. 1·15 lakhs in the previous year. The decrease was due to the absence of sales of district press materials during the year. The total expenditure was Rs. 5·05 lakhs against Rs. 4·22 lakhs.

Publications

278. A sum of Rs. 0·59 lakh, as against Rs. 0·54 lakh in the previous year, was realized by the sales of Acts and books including Gazettes, Law Reports and E.T. papers, while the sales by Agents amounted to Rs. 6,810. Acts and books to the value of Rs. 0·49 lakh were issued free against Rs. 0·47 lakh in the previous year.

Printing and binding

279. The total number of standard pages printed during the year including the pages set on the Linotype machines was 239,433 against 200,555 in the previous year, and the cost per page in the Central Press fell from Rs. 1-6-1 to Rs. 1-5-4. There was a small decrease in the cost per page in the Mount Road and Ootacamund Branch Presses also, while there was an increase in the case of the Penitentiary Branch Press. The total number of impressions was 110,736,135 against 90,176,059 in 1918–19. The cost per 1,000 impressions in the Central Press fell from Rs. 1-6-3 to Rs. 1-5-4 and there was a slight decrease also in the Mount Road and Penitentiary Branches. The total debit against binding for all the Presses amounted to Rs. 1·21 lakhs showing an increase of Rs. 22,973 due chiefly to higher prices of materials and larger outturn.

Miscellaneous

280. An expenditure of Rs. 0·78 lakh was incurred on additions to plant. The output of the Type Foundry was 69,166 lb. of type, 16,728 lb. of stereos and electros, 77 punches and 213 matrices, while the expenditure was Rs. 0·67 lakh against Rs. 0·39 lakh in the previous year, due chiefly to larger quantities of vernacular types cast for electoral rolls and to the higher prices of raw materials. The number of standardized and non-standardized forms despatched during the year was 118 millions or 20 millions more than in 1918–19. There was an unusual increase in the issue of Gazettes Extraordinary during the year.

THE CHEMICAL EXAMINER'S DEPARTMENT (1919)

[*G.O. No.* 225, *Local and Municipal* (*Medical*), *dated the* 8*th May* 1920; *Statistics of British India*, *Vol. VI*, *Administrative*, *etc.*—*Medico-legal investigations*]

Medico-legal investigations

Poisoning

Stains

General analyses

281. The total number of cases investigated by the Chemical Examiner during the year was 1,425 as against 1,413 in the previous year and the number of articles examined 3,756 as against 3,202. Of the former, 199 were cases of suspected human poisoning, 89 of suspected animal poisoning, 342 related to suspected stains and 29 to miscellaneous medico-legal cases. The remaining 766 were cases of general analyses undertaken for various Government departments and private parties. Poison was detected in 33·2 per cent of the cases of suspected human poisoning and in 38·2 per cent of suspected animal poisoning as against 43·2 and 62·8 respectively in 1918. Of the 342 cases of suspected stains 312 were examined for blood and 30 for blood, semen and other stains. The percentage of detection was 80·4 as against 79·4 in the previous year. Seven hundred and fifteen specimens of stains were sent to the Imperial Serologist, Calcutta. Of these, 630 were found to contain human blood, five human and ruminant blood, three blood of sheep or goat, five blood of ruminant, one non-mammalian blood and one pig's blood. Fifty-two specimens were so much disintegrated or decomposed that their origin could not be determined, and the remaining eighteen specimens contained no blood. The principal inorganic poisons detected were compounds of arsenic and mercury while the principal organic poisons were aconitine, atropine, nerium odorum and cerbera thevetia. Fifty-nine miscellaneous articles comprising human bones for identification, foods for adulterants, poisons under the Poisons Act, kerosene oil under the Petroleum Act, opium under the Excise Act, and counterfeit coining articles were also examined. The principal miscellaneous articles examined were ghee for the Commissariat department, fish oil and bees-wax for the Munitions department; turpentine, kerosene oil, explosives, matches, liquid fuel and dye stuffs for the Customs department; pharmaceutical preparations, stomach washings, stationery articles, water, hides and explosives for other Government departments; indigo, water for industrial purposes, fish guano, ghee, urine, wine and rice for private parties and municipalities.

CHARITABLE INSTITUTIONS (1919–20)

General statistics

282. Excluding dispensaries, there were during the year 3,030 charitable institutions in the Presidency with an income of Rs. 16·83 lakhs, 300 muras of rice and 67 garces of paddy. Of these institutions, 2,036 were maintained entirely by subscriptions and donations from the general public and by endowments in land and money, the total receipts from all these sources amounting to Rs. 9·71 lakhs. Three hundred and two institutions were maintained by Government at a cost of Rs. 1·81 lakhs and 104 were supported partly by Government and partly by the public at a cost of Rs. 2·35 lakhs. The maintenance of the remaining 588 institutions costing about Rs. 2·96 lakhs devolved wholly or in part on local bodies. The funds of the institutions were devoted to various objects. In all 1,831 institutions were intended to provide travellers with accommodation, cooked food and other supplies. Of these 1,062 were exclusively for Hindus, 42 for Muhammadans and one for Europeans and Anglo-Indians; the remaining 726 were not restricted to any particular class. For the relief of paupers 451 institutions were maintained of which 197 were restricted to Hindus, 39 to Muhammadans and one to Europeans and Anglo-Indians; the remaining 214 were open to members of all classes and creeds. There were 647 institutions exclusively devoted to giving help to Brahmans and Byragis. There were also six institutions for orphans, 3 for Rajput boys and girls and 4 for the support of the

blind, the deaf and lepers. The total number of persons reported to have been aided during the year at all the charitable institutions was 13,002,698 or 1,205,293 more than in the previous year. The average daily number of inmates in the Monegar Choultry was 70·76 as against 60·80 in the previous year and the daily average cost of diet per pauper was As. 4–4 against As. 3–2. The chronic wards which formed part of this institution were taken over by Government as part of the Rāyapuram Hospital, with effect from the 1st April 1919. The balance to the credit of the charity on the 31st March 1920 was Rs. 3,017. The daily average number of in-door paupers in the Raja of Venkatagiri's Choultry was 9·36 and of out-door paupers 95·58. The corresponding figures for the previous year were 9·82 and 98·42. The daily average cost of diet of an in-door pauper was As. 4–6 and of an out-door pauper As. 1–6 as against As. 3-4 and As. 1-1 in the previous year. The receipts of the Triplicane Langarkhana including an opening balance of Rs. 167–15–6 amounted to Rs. 5,527–15–6. The daily average number of paupers who received help from the institution was 165 or eleven less than in the preceding year.

Monegar Choultry

The Raja of Venkatagiri's Choultry.

Triplicane Langarkhana

MUHAMMADANS IN THE SERVICE OF GOVERNMENT (1919–20)

283. There were 8,553 Muhammadans in the superior service of Government on the 1st April 1920, or 614 more than in the previous year. The number admitted into the service during the year, excluding those who enlisted as police constables (640), was 47. Nine of these found entry into the Education department and twelve in the clerical ranks of the Registration and Land Revenue departments. Fifteen persons held posts with an annual salary of Rs. 5,000 and above, 39 were in receipt of salaries ranging from Rs. 2,500 to Rs. 5,000, 121 from Rs. 1,000 to Rs. 2,500, 267 from Rs. 500 to Rs. 1,000 and 914 from Rs. 250 to Rs. 500. The number earning from Rs. 120 to Rs. 250 rose from 7,057 to 7,170 and 27 drew Rs. 120 and less as against five in the previous year. There were 6,585 Muhammadans employed in the Police department, 481 in Courts of Law, 341 in the Land Revenue, 290 in the Education, 303 in the Forest, 143 in the Registration, and 133 in the Salt departments. Other departments employed less than a hundred each. The percentage of Muhammadans to the total population of the Presidency was only 6·6, but 13·64 per cent of the posts in the superior service were held by them.

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REPORT

ON THE

ADMINISTRATION

OF THE

MADRAS PRESIDENCY

FOR THE YEAR

1920-21

MADRAS
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CONTENTS

PAGE

PREFATORY NOTE vii

PART I

GENERAL SUMMARY ix

PART II

THE REPORT

CHAPTER I—PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PARA. PAGE

1 Physical features of the country, area, climate and chief staples **1**

POLITICAL

PARAS. PAGE

2 Historical summary **1**

3 Form of administration **1**

4 Character of land tenures **1**

5 System of survey **1**

6 System of settlements **1**

7 Civil divisions of the British territory **2**

8 Details of the census of 1911—tribes and languages **2**

9 Changes in the Administration ... 2

10 His Excellency the Governor's tours 2

Relations with Tributary States

TRAVANCORE STATE

11 General 3
12 Revenue and finance 4
13 Protection and legislation 4
14 Production and distribution 5
15 Vital statistics and medical services ... 5
16 Education 5

PARAS. PAGE

COCHIN STATE

17 General and political 6
18 Revenue and finance 6
19 Protection and legislation 6
20 Production and distribution 7
21 Vital statistics and medical services ... 7
22 Education 7

PUDUKKŌTTAI STATE

23 General and political ... ...
24 Revenue and finance ... ...
25 Production and distribution 8
26 Protection and legislation 9
27 Vital statistics and medical services ... 9
28 Education 10

BANGANAPALLE STATE

29 General and political 10
30 Revenue and finance 10
31 Protection and legislation 10
32 Production and distribution 10
33 Vital statistics and medical services ... 10
34 Education 10

SANDUR STATE

35 General and political 11
36 Revenue and finance 11
37 Protection 11
38 Production and distribution 11
39 Vital statistics and medical services ... 12
40 Education 12

41 **Condition of the people** 12

42 **Political pensions** 12

CHAPTER II—ADMINISTRATION OF THE LAND

Realization of land revenue

PARAS.		PAGE
43	Sources of land revenue	13
44	Collections	13
45	Coercive processes	14
46	Transfer of registration	14
47	Loans and advances	14

Surveys

48	Parties	14
49	Operations	15
50	Central Office	15
51	Finance	15

Settlements

52	Parties	16
53	Operations	16
54	Registers	18
55	Finance	18

Land records

PARAS.		PAGE
56	General	18
57	Maintenance	18
58	Training of staff	19
59	**Waste lands**	19
60	**Government estates**	19

Wards' estates

61	Estates under management	20
62	Finance	20
63	Works	21
64	Debts	21
65	Education	21
66	Miscellaneous	22

Revenue and rent-paying classes

67	Revenue-paying classes	22
68	Rent-paying classes	22

CHAPTER III—PROTECTION

69	**Legislating authority**	**23**

Course of legislation

70	General	23
71	Old Legislative Council	23
72	New Legislative Council	23
73	Government of India	24

Police

74	Administrative changes	24
75	Police force	24
76	Village police	25
77	Armed reserves	26
78	Railway police	26
79	Statistics of crime	27
80	Detection and prevention of crime	28
81	Criminal Investigation Department	29
82	Finance	29

Criminal justice

83	General	30
84	Original cases	30
85	Appeals	30
86	Reference and revision	31
87	Jury system	31
88	Miscellaneous	31

Prisons

89	Accommodation	32
90	Prisoners of all classes	32
91	Convicts	32
92	Conduct	33
93	Vital statistics	33
94	Finance	34
95	Miscellaneous	34

Civil justice

96	General	34
97	Litigation	34
98	Courts of original jurisdiction	35
99	Appellate courts	36
100	Insolvency	37
101	Miscellaneous	37
102	Finance	37

Registration and companies

103	Registration	38
104	Registered companies	39
105	Notaries Public	40

Co-operative societies

106	General	40
107	Working of societies	41
108	Miscellaneous	43

Local Board administration

109	General	43
110	Finance—Receipts	44
111	Do. Expenditure	44
112	Railways	45

Municipal administration—Mufassal

113	General	46
114	Finance—Receipts	46
115	Do. Expenditure	46

Municipal administration—City of Madras

116	Finance	47
117	Works	47
118	Education	48
119	Sanitation and medical service	48
120	Miscellaneous	48
121	**Military—Auxiliary Force, India**	49

Marine

122-124	Madras Port Trust	49
125-126	Minor ports	50

Mortality from wild animals and snakes

127	Mortality	51
128	Rewards	51

Miscellaneous

129	Arms, explosives and sulphur	51

CHAPTER IV—PRODUCTION AND DISTRIBUTION

PARAS. PAGE

Agriculture

130 General ... 52
131 Agricultural research and experiments ... 53
132 Scientific research and experiments ... 54
133 Aid to the public ... 55
134 Agricultural associations, shows and fairs. 56
135 Finance ... 56
136 Civil Veterinary Department ... 56

Weather and crops

137 Rainfall ... 56
138 Crops ... 57

Horticulture

139 Government Botanic Gardens and Parks, the Nilgiris ... 58
140 The Agri-Horticultural Society, Madras ... 58
141 Government cinchona plantations ... 58

Fisheries

142 General ... 59
143 Marine work ... 60
144 Inland fisheries ... 61
145 Miscellaneous ... 61

Forests

146 General ... 61
147 Area ... 62
148 Communications and buildings ... 62
149 Protection of forests ... 63
150 Sylviculture ... 64
151 Exploitation ... 64
152 Live stock ... 65
153 Forest College, Coimbatore ... 65
154 Finance ... 66

Mines

155 Output ... 66
156 General condition of the employees ... 66

PARAS. PAGE

Manufactures

157 Cotton and jute mills ... 66
158 Minor industries ... 67
159 Factories ... 67
160–162 Department of Industries ... 68

Sea-borne trade

163 General summary ... 71
164 Foreign trade ... 71
165 Government transactions ... 72
166 Shipping ... 72
167 Trade according to countries ... 72
168 Coasting trade ... 73
169 Ports ... 73
170 Miscellaneous ... 73

Public Works

GENERAL

171 Administrative changes ... 74
172 Chief Engineer's office ... 74

CIVIL WORKS

173 Works in progress ... 75
174 Workshops ... 75

175 RAILWAYS ... 76
176 TRAMWAYS ... 76
177 CANALS ... 77

IRRIGATION

178 Gross expenditure and revenue ... 77
179 Class I, Major works ... 77
180 Class II, Minor works and navigation ... 78
181 Class III works ... 78
182 Class IV, Agricultural works ... 78
183 Investigation of projects ... 78
184 Miscellaneous ... 78
185 Hydro-electric surveys ... 79

CHAPTER V—REVENUE AND FINANCE

Revenue and Finance other than Municipal

(*a*) GROSS REVENUE

186 Revenue and expenditure ... 80
187 Surplus revenue ... 81
188 Cash balances ... 81

(*b*) IMPERIAL REVENUE AND FINANCE

189 General ... 82
190 Land revenue ... 82
191 Customs ... 82
192 Opium ... 83
193 Salt ... 83
194 Excise (Abkāri) ... 83
195 Stamps ... 83
196 Income-tax (excluding super-tax and excess profits duty) ... 84
197 Super-tax ... 84
198 Excess profits duty ... 84
199 Other Imperial receipts ... 84
200 Transfers between Imperial and Provincial ... 84
201 Expenditure on famine relief ... 84
202 Other Imperial expenditure ... 84
203 Capital outlay on State railways and Irrigation works not charged to revenue ... 85
204 Imperial loans ... 85

(*c*) REVENUE AND FINANCE OTHER THAN IMPERIAL.

205 Provincial revenues ... 85
206 Land revenue ... 85
207 Stamps, Excise and Income-tax ... 85
208 Forests ... 85
209 Registration ... 86
210 Canal revenue ... 86
211 Other Provincial receipts ... 86
212 Expenditure on famine relief ... 86
213 Other Provincial expenditure ... 86
214 Provincial loans ... 87
215–216 Local funds ... 87
217 **Municipal revenues** ... 88

Excise administration

218 General ... 88
219 Country spirits ... 88
220 Toddy ... 89
221 Foreign liquor ... 89
222 Intoxicating drugs ... 89
223 Finance ... 89
224 Opium ... 89
225 Offences ... 90

CHAPTER VI—VITAL STATISTICS AND MEDICAL SERVICES

PARAS.		PAGE
226	**Details of census**	**91**
	Births and deaths	
227	Population	91
228	Registration of vital statistics	91
229	Chief diseases	92
230	Europeans and Anglo-Indians	93
	Emigration and immigration	
231	Regulated	93
232	Non-regulated	93
	Medical relief	
233	Medical institutions	94
234	Relief	94
235	Finance	94
236	Madras Medical College	94
237	Medical schools	95
238	**The Pasteur Institute, Coonoor**	95
239	**Lunatic asylums**	96
240	**Sanitation**	96
241	**Vaccination**	97

CHAPTER VII—INSTRUCTION

242	**General system of public instruction**	**99**
	Education	
243	Administrative events of the year ...	99
244	General statistics	99
245	University and collegiate education ...	100
246	Secondary education	100
247	Elementary education	100
248	Special education	101
249	Female education	101
250	European education	101
251	Education of Muhammadans	101
252	Education of backward classes and others	102
253	Finance	102
254	**Reformatory School, Chingleput** ...	102
	Miscellaneous	
255	Government examinations	103
256	Lawrence Memorial School	103
257	**Literary societies**	**104**
	Literature and the Press	
258	Public libraries	104
259	The Madras Record Office	105
260	Periodicals	105
261	Registration of books	105
	Arts and sciences	
262	Government Museum	106
263	Meteorology	106
264	Astronomy	106

CHAPTER VIII—ARCHÆOLOGY AND EPIGRAPHY

265	Archæology	108
266	Epigraphy	108

CHAPTER IX—MISCELLANEOUS

267	**Ecclesiastical jurisdiction**	**110**
	Ecclesiastical	
268	Church of England	110
269	**Stationery**	110
	The Government Press	
270	General	111
271	Publications	111
272	Printing and binding	112
273	Miscellaneous	112
274	Finance	112
275	**The Chemical Examiner's department**	113
276	**Charitable institutions**	113
277	**Muhammadans in the service of Government**	114

PREFATORY NOTE

In compliance with the orders of the Government of India, Part I of this publication—the "General Summary"—deals with the calendar year 1921 and Part II—the main report—with the official year 1920–21 except where specifically stated otherwise.

PART I

GENERAL SUMMARY

The beginning of the year 1921 saw the inauguration of the new Legislative Council under the Government of India Act, 1919. There was a full attendance when it was formally opened by His Royal Highness the Duke of Connaught on the 12th January and it began its regular sittings on the 16th. With the increased powers and responsibilities thrown upon it there was naturally an increase in the volume of the debates and the sessions occupied more than twice as many days as in the preceding year. Five Acts—four of them amending the Madras District Municipalities Act, the Madras City Municipal Act and the Madras Cattle Diseases Act—were passed and received the assent of the Governor-General ; one Bill—the Madras City Tenants Protection Bill—was passed but was remitted back to the Council by His Excellency the Governor in Council for reconsideration ; and three other Bills were under consideration. While it cannot yet be said that a regular system of organized parties has developed, there are indications that gradual progress is being made in that direction : and the Ministry has the general support of the non-Brahmans. The Council and the Presidency sustained a serious loss by the resignation and subsequent death of Diwan Bahadur A. Subbarayalu Reddiyar, one of the first Ministers. His place was taken by Rao Bahadur A. P. Patro who took his seat on the 11th July 1921

Political situation.—2. The political atmosphere was disturbed throughout the year. The return of the local delegates from the Nagpur meetings of December 1920 marked the beginning of an intensified campaign of agitation and misrepresentation, directed first to attempts to secure a boycott of His Royal Highness the Duke of Connaught's visit, which met with little success, and to foment industrial unrest, which at the time met with little more. Persistent propaganda in the rural areas throughout the Presidency, however, eventually produced results, the most striking of which was the Mappilla rebellion in Malabar. Over 1,100 village sabhas, with 150,000 members, were formed and did their share in spreading the doctrines inculcated by the non-co-operators, and the recruitment of volunteers went on with varying success in different districts though comparatively little practical harm can so far be definitely traced to these bodies except in Malabar, where the volunteers were active in stimulating fanaticism, and towards the end of the year in Guntūr, where they were used to preach civil disobedience and put pressure on village officers. There was much talk of the boycotting of schools and law courts but little practical result and the boycott of foreign cloth has only found favour in a few places. The more general manifestations of the non-co-operation movement took the form of encouraging defiance of the forest regulations, resulting in many prosecutions and a few encounters between villagers and the authorities, and of a campaign against the excise administration. The latter was supported by many genuine temperance reformers, but gained more strength from discontented abkāri renters,

or would-be renters, and the motives of both were skilfully exploited by the agitators for their own ends. Great difficulty was experienced at the auctions of both arrack and toddy shops and the rentals eventually obtained were far below those anticipated and lower than those of the previous year. The picketing of shops was practised freely and both shopkeepers and their customers were subjected to intimidation, indignities and sometimes violence. As might be expected, the chief results have been large profits to the renters and an increase of illicit drinking rather than any real furtherance of the cause of temperance. Feelings were inflamed by visits from Gandhi and the Ali brothers in March and April, when the first named made speeches at most of the important towns in the Northern Circars and in Madras, Shaukat Ali at Bezwada and Guntūr and Muhammad Ali at Madras and Erode; Gandhi made another tour in the Presidency in September, visiting many important towns in the South, but was prevented from going to Malabar, which was then in the throes of rebellion. It was when in company with Gandhi at the beginning of this tour that Muhammad Ali was arrested at Waltair and sent to Karachi for trial. In October proceedings had to be taken for the second time against Yakub Hasan (who had been committed to prison earlier in the year in connexion with his activities in Malabar) and he was sentenced to a substantial term of imprisonment under section 124-A of the Indian Penal Code in Tanjore; a similar sentence was passed in November against Abdul Majid Sharar, another leading Muhammadan agitator and editor of the "Qaumi Report." All through the later months of the year the persistent vilification of the Government by unscrupulous speakers rendered necessary repeated resort to the preventive sections of the Criminal Procedure Code with many prosecutions for sedition or under section 188 of the Indian Penal Code.

In Malabar there were disquieting signs in February; local volunteers and agitators from outside, including some Hindus, were doing their best to excite the populace on the Khilafat question and the District Magistrate found it necessary to take proceedings against Yakub Hasan, a native of Bombay, who settled in Madras many years ago and had at one time been a member of the Legislative Council, but after resigning his seat in May 1920 as a protest against the Turkish peace terms had taken to Khilafat preaching. On failure to execute a bond to keep the peace he was committed to prison for six months and the District Magistrate's action, and the realization that it was supported by Government and public opinion generally, restored quiet for a time. In February there was rioting at Trichur in the Cochin State, in which Mappillas from Malabar were implicated; agitation continued and was intensified after the visit of the Ali brothers to Erode; and though Ramzan passed peacefully, there was a conflict between Mappillas and the police at the beginning of August, when the police made an unsuccessful attempt to arrest some Mappillas accused of breaking into a Brahman's house; and on the 20th of that month matters came to a head. An attempt on that day to arrest the ringleader, Ali Musaliar, failed; the District Magistrate, who was supported by police and a small body of troops, was attacked by large crowds of Mappillas and the force had some difficulty in extricating itself; within a few days the whole of the Ernad and Walavanad taluks

and parts of four other taluks were in a state of insurrection; and order had not been completely restored by the end of the year. Ali Musaliar himself was captured on the 30th August, but it was not until considerable reinforcements had been sent to the district in October that any great headway was made in suppressing the rebellion. Meanwhile, what had, in the first few days, appeared to be a rising against the Government and Europeans had definitely assumed the form of a fanatical outburst against all non-Muhammadans. Public offices were sacked and burned, treasuries looted and records destroyed, temples desecrated, railway and telegraph communication interrupted; there were raids on planting estates and Hindu homesteads accompanied by murders of a particularly revolting kind, burning, ravishing, looting and forcible conversion to Islam and for some weeks a large area was entirely in the hands of the rebels who went so far as to set up one or more so-called Khilafat kingdoms. Martial law was proclaimed in the affected area on the 24th August and remained in force for the rest of the year. During that period the area out of control was gradually contracted, most of the leaders with many of their followers were captured or surrendered and the fighting gangs left in the field were reduced to one or two, fluctuating in strength from 200 to 500, though occasional outrages by other smaller bodies continued. The nature of the country, which is hilly and in parts thickly wooded, and the fact that most of the inhabitants other than Mappillas had fled from their homes contributed to prolong the operations. It is impossible to estimate the number of Hindus killed or injured or the extent of the damage done. It is believed that some 3,000 Mappillas were killed in the course of military operations, while the casualties in the Government forces were—

POLICE: killed: officers 2, other ranks 16.
wounded: officers 2, other ranks 15.
MILITARY: killed: officers 6, other ranks 21.
wounded: officers 8, other ranks 103.

A distressing occurrence was the death by asphyxiation of some 70 prisoners who were being conveyed by train from the disturbed area to Bellary for incarceration on the night of the 19th November 1921. The incident has been made the subject of a special enquiry by a committee presided over by Mr. A. R. Knapp, C.S.I., C.B.E., Special Commissioner for Malabar, but its report had not been received by the end of the year.

Labour.—3. The condition of labour remained very unsettled throughout the greater part of the year. No less than 29 strikes occurred, of which 18 were in Madras City itself, though few were of any importance. The deadlock in the Buckingham and Carnatic Mills which was in existence at the end of 1920 appeared to have come to an end in March with a rapprochement between the management and the employees; but a large section of the latter were again worked upon by extremist political influences and in May there was a lightning strike in the carding room of the Carnatic Mill which held up work in other departments and into which the Buckingham Mill was subsequently drawn. The later developments were due to the secession from the union of the Adi Dravida employees who refused to join in the strike. The caste Hindus and Muhammadans at first threatened them and then resorted to actual violence; feelings

on both sides were inflamed, and open rioting broke out accompanied by incendiarism. The police were frequently unable to maintain order and there were recurring affrays of a serious nature between the two parties in which bombs, swords, knives and other weapons were employed ; the police had to fire on several occasions and troops had to be called in to assist them ; and among other casualties a sergeant and two constables were killed. Reserve police were brought in from mufassal districts, a small force of British troops was temporarily located in the affected area, and it was decided to employ additional police at the cost of the inhabitants. At an early stage of these troubles a committee was appointed to inquire and report on the disturbances and the measures taken to restore order, under the Chairmanship of Sir William Ayling, and their report was published. It was not, however, until October that the trouble subsided with the collapse of the strike. A wages census was taken during the year and the results will be shortly formulated. Special work for the depressed classes continued ; but owing to lack of funds it had to be confined to a few districts.

Finance.—4. The financial position during the past year was mainly influenced by two factors—political agitation and the general revision of pay of gazetted and non-gazetted officers. Owing to the first the gross revenue for the year shows a very serious falling off. The expenditure charged to Revenue was abnormally high owing mainly to the increase of salaries. In addition, the encouragement of local educational schemes involved considerable expenditure in the form of subsidies to local bodies and grants-in-aid. It became necessary, therefore, to economise in every possible direction. All new schemes of development have had to be abandoned for the time being, the scope of some on which a beginning had been made has been narrowed and a rigid examination has been made of the possibility of cutting down the permanent services. As a result of this last a reduction of Rs. 71 lakhs has been arrived at, but the full benefit will be obtained only in the coming year, the saving found possible at short notice being comparatively small.

Agriculture.—5. The practical importance of research work in improving agriculture, which had been amply demonstrated, was recognized by the addition of several specialists to the agricultural staff, including a bacteriologist, a chemist and a mycologist. The experiments carried on have resulted in the improvement of cotton and rice over considerable areas, and recent research work promises still further improvements. Considerable progress has also been made in the extermination of pests. The success in the practical application of these discoveries and their adaptation to local conditions has been mainly due to the increase of the district staffs. Each of the eight circles into which the Presidency is divided has now a gazetted officer in charge and only three districts are still without an agricultural subordinate.

Land Records.—6. As a result of the Resolution passed by the Legislative Council deleting the provision for the Land Records Department from the budget, the posts of Director, Assistant Directors and Land Records Tahsildars were abolished, and the work of land record maintenance transferred to the Revenue Department.

Fisheries.—7. There was a remarkable output of scientific and technical publications during the year by the Fisheries Department. The success of the Government fish factories has demonstrated the financial possibilities of this local industry : and in order to encourage its development by private enterprise, it has been decided to remove the Government Cannery to a better situation ; a practical hand-book on fish canning has been published with the same object, while considerable improvements have been effected both in the method and conditions of fish-curing. Research work has been successful in producing a " fish-meal " poultry food, and a cheap sardine oil equal in therapeutic value to B.P. Codliver Oil. Inland pisciculture is progressing favourably and a large number of fresh tanks have been taken over by the department. Interesting developments in deep sea fishing may be expected from the introduction of a Danish seine net, which is both cheap and efficient and particularly adapted to the conditions of these coasts, and experiments with which are still in progress.

Forest.—8. The working of the forest regulations has presented unusual difficulties. The village ryot finds it difficult to understand the value of postponing immediate advantage to future benefit : and the forest restrictions have therefore appeared to him unnecessarily irksome. The sense of grievance has been exploited by the agitators for their own purposes and the attention of Government has in consequence been specially devoted to endeavours to differentiate between real and fictitious grounds of complaint. Consideration has, in particular, been given to the reorganization of forest panchayats, which under effective supervision should prove a valuable agency for the control of grazing areas and reserves utilized primarily to meet other village requirements. It is hoped by this means to eliminate some at least of the existing friction between the ryot and the forest department. The Consulting Forest Engineer to the Government of India, who was deputed to inquire into the exploitation of the forests, reports that they represent a vast accumulation of wealth the development of which can be made self-supporting. In this connexion it is interesting to find that ebony logs from Gōdāvari have been used for the new buildings at Delhi, and the wood of Terminalia tomentosa is commanding a high price and a large sale in the London market ; while the use of nux vomica for the production of strychnine for insecticide has procured a rapidly widening market for that plant. Owing to the financial position no new projects of development have been taken in hand, and work has been mainly confined to completing those already in progress. The working plans for the Nilambur valley and Goomsur forests were completed in the year and the saw mill at Russellkonda is expected to open early this year. Sylviculture is being carried on, the chief attention being devoted to the artificial reproduction of teak and the natural growth of Hopea forests.

Trade and Ports.—9. A marked feature of the year was an increase of sea-borne trade amounting to Rs. 63 lakhs. This was due to an expansion of the coasting trade, since a great increase in foreign imports was more than counterbalanced by a decrease in exports. The swelling of import trade was due to the large number of orders placed in the previous year when exchange was still favourable, while the shrinkage in

exports was the result of adverse conditions in foreign markets. The fall in the value of the rupee did something to restore equilibrium during the latter half of the year: but meanwhile the export trade had actually decreased in value by no less than Rs. 611 lakhs in nine months. The aggregate value of sea-borne trade for the whole Presidency amounted to Rs. 5,489 lakhs, the customs revenue thereon being Rs. 149 lakhs, or an increase of Rs. 22 lakhs over last year's income: this was mainly due to the enhanced rates of duty which came into force in March. The Madras Port Trust was at length able to dispense with the surcharge of 75 per cent imposed during the war, and a revised scale of rates was substituted which it is hoped will bring in an adequate revenue without bearing too heavily on trade. Schemes are now on foot for improving the storage accommodation and railway facilities for the Madras Port. Some preliminary work has been done on the new Cochin harbour and the examination of schemes for a deep water harbour at Tuticorin and for the Rāmēswaram canal has been taken in hand.

Abkāri.—10. The most striking feature of the excise statistics was a very serious decline in the revenue from country spirits and toddy, which will affect the figures of 1922 even more than those of 1921. This was the result of the determined attack made upon the abkāri system by political agitators, which resulted in a reduction of the rentals of most shops and a fall in licit consumption. The increased duty on foreign liquor, opium and hemp drugs led to a reduction in the consumption of these articles, but the revenue remained much the same as last year.

Industries.—11. The Advisory Board of Industries consisting of twelve members, which was constituted at the end of last year, did valuable work; and was invariably consulted on all matters of general importance. The Information Bureau was freely resorted to and supplied a large amount of information on industrial subjects. A great deal of practical work was also carried out. Experiments were made to investigate the possibilities of manufacturing flour phosphate, dyes, tartaric acid and coir fibre, and of cheapening the preliminary processes of weaving. An ink of good quality was produced and put on the market. Plant for boring and pumping was in such demand that the existing machinery proved inadequate to meet it. Progress in other directions was equally satisfactory. The Government Trade School at Madras has now 217 students: the number of industrial schools supported by Government increased to 40: and the organization of working classes for juvenile hands employed in the various firms was aided and encouraged in every possible way. Seven peripatetic weaving parties toured the districts and instructed the local weavers in improving and cheapening their methods of work.

Co-operation.—12. The important place filled by the societies inaugurated under the Co-operative Societies Act is shown by the steady growth both in the number of societies and of the members enrolled: 1,203 new societies were registered during the year, while only 56 were liquidated. Not the least satisfactory feature of this progress was the increase in societies for the backward classes. The general success has stimulated many branches to further experiments such as the undertaking of contracts, the selling of stores at village markets and the procuring of the

scientific manure for agriculture. Another healthy sign is the attempt being made in certain districts to find all the share capital for the central bank from among its own rural societies. The permission granted by Government to execute decrees and orders of liquidation through the Revenue Department contributed not a little to the confidence and stability of the banks.

Public Works Department.—13. The considerable increase to be noticed under Civil Works during the current year was due mainly to the extensive building programme now in progress. Five schemes for improving the water-supply of large towns were under execution. Three hospitals were under construction, a fourth was sanctioned, and preliminary plans prepared for yet another in Madras. Other important items in progress were the Industrial Institute buildings at Madura and extensions of the Presidency College and Queen Mary's College in Madras. In view of the increase in the cost of materials and labour, a special officer was appointed to revise the various irrigation projects in progress or under consideration in the delta districts and to select the most promising only for immediate construction. It is interesting to find that the experiment of handing over the management of certain channels in the Gōdāvari delta to village panchayats promises to be a success and is being extended.

Police.—14. The conditions prevailing throughout the year inevitably threw an additional burden of arduous and sometimes hazardous duty upon the police, and on the whole they discharged these duties with efficiency and loyalty. The revised scheme of pay for the subordinate ranks of the force was introduced in March and the conditions of service were materially improved ; and though there were again some mutterings of discontent at the end of the year int he City Police the general tone was better ; punishments became rarer ; and resignations and desertions were considerably fewer. There was an improvement in the detection of grave crime and the measures taken to deal with criminal tribes have been generally successful ; in particular, the reclamation of the Kallars in Madura progressed rapidly. Kallar panchayats were introduced in 426 villages, 151 schools were opened, and industries started in 9 centres ; and not only did crime decrease, but many of the Kallars themselves actively aided the police in arresting criminals. The operations against the Chenchus practically put an end to serious crimes among them, and the punitive force will probably be shortly disbanded. The prevailing spirit of unrest on several occasions broke out into open violence. Two illustrations of the unsettled temper of public feeling may suffice. At the end of March, the Kumbakōnam Municipal Council passed a resolution enhancing the tax on vehicles : on April 3rd a large crowd which gathered to protest against the order became unruly and began obstructing traffic : the ringleader was promptly arrested by the police. Incensed at this the mob surrounded the station and commenced throwing stones, injuring some of the men on duty ; the situation became so serious that the police were compelled to open fire and one of the rioters was killed before the crowd could be dispersed. At Veldurti in Guntūr district opposition to the forest regulations became so pronounced that the police had to be called in to support the local authorities : on September 23rd

the police party was attacked by a large crowd and had to open fire before order could be restored. No one was injured. A special police force had also to be maintained in Rāmnād and another newly established in Anantapur.

Law and Justice.—15. The work of the Civil Courts in general continued to grow, and a number of new courts had to be opened during the year. The increased litigation is mainly in the Sub-Judges' Courts, whereas there has been a considerable fall in the number of small cause suits in District Munsifs' Courts in some districts, which is attributed to the creation of local Bench Courts. There was also an increase in the institution of cases on the Original Side of the High Court and the Court of Small Causes and in the City Civil Court ; the rise in the two former courts is attributed to the results of the speculation after the war and the subsequent collapse of the markets ; in the City Civil Court the increase is probably due to the rise in value of property, and the preference shown for this court in small suits, as litigants can obtain there a fuller hearing and a right of appeal. In the early part of the year, there was a considerable increase in crime ; latterly ordinary crime diminished, but the Mappilla rebellion and the political agitation resulted in an enormous increase in particular kinds of offences and special summary courts and a special tribunal of three Judges had to be established in Malabar in September to deal with cases in the Martial Law area.

Jails.—16. As a result of the recommendations of the Jails Committee, preparations had to be made to receive back convicts from the Andaman Island settlements which are to be given up. Special attention is being devoted to the health and welfare of prisoners in jail. The water-supply where deficient, is being improved both in quantity and quality ; efforts are being made to stamp out the prevalent hookworm disease : and instruction in hygiene is being given by the Medical officers. Attempts have also been made to improve the moral character of the convicts by lectures and elementary education : and Discharged Prisoners' Aid Societies have been established to attend to the welfare of prisoners after their release. The general health of the prisoners improved and mortality decreased, in spite of local epidemics of influenza and cholera. The number of offences committed by prisoners in jail showed a marked fall. Two serious outbreaks occurred during the year—one at Trichinopoly where 49 prisoners escaped from the Central Jail and the other at Gunnavaram in Kistna where some convicts overpowered the sub-jail guards, ransacked the strong room and escaped. Nearly all the convicts of both parties were recaptured. In addition there was an émeute which attained dangerous proportions at Cannanore on the 4th December, though none of the prisoners succeeded in getting out of the jail. It was started by a few convicts who broke open the carpenter's store and armed themselves with chisels, iron bars and pieces of wood and proceeded to liberate a large number of Mappillas from the rebellion area who were confined under remand. Some of the convict warders behaved well but the small armed staff of the jail was faced by about 150 riotous prisoners and was unable to restore order without recourse to firing. Ten prisoners were killed and 21 injured in various ways. As might be expected, the increase in political crime and the Mappilla rebellion have combined to throw great

strain on the prison accommodation which resulted in overcrowding in many of the jails. Some relief has been afforded by the establishment of a prisoners' camp at Bellary.

Public Health.—17. The general condition of public health during the year was on the whole satisfactory. Plague alone continued to claim an increasing number of victims ; otherwise there was a fall in the death-rate generally, and a very marked decline in infantile mortality. In order to give more practical effect to sanitary schemes, District Health Committees were formed in six districts and 17 health officers were put under training on behalf of local bodies.

Local Self-Government.—18. The main feature of interest in the sphere of Local Self-Government was the reconstitution of the municipalities and local boards under the new Acts. All such councils and boards now elect at least three-quarters of their members. The substitution of elected for nominated chairmen is almost complete, only four non-elected chairmen remaining.

Medical.—19. General improvements in the pay and prospects of the provincial medical staff were effected ; in particular the hitherto unpopular health officers' cadre was provincialized and the conditions of service materially improved, so that a recruitment in the future may be less difficult than in the past. It has been generally felt that the benefit of medical relief is not sufficiently accessible in the remote villages of the mufassal: but the sub-assistant surgeon has ordinarily no opportunity of touring. The Government therefore initiated a scheme for enlarging the sub-assistant surgeons' cadre and doubling the staff of dispensaries.

Education.—20. The reorganization of the services proceeded in accordance with the principles laid down by the Secretary of State. The posts of Principal in six colleges were transferred to the Indian service. The Government Muhammadan College, Madras, was raised from the second to the first grade and the status of other colleges was improved. A fourth form was opened in 35 secondary schools and a fifth form in 19, and the total number of complete high schools was increased to 202. In the way of encouragement to the education of girls, three new girls' secondary schools and three secondary training classes were instituted and an L.T. class was attached to Queen Mary's College, Madras. The Madras Elementary Education Act came into force from the 1st April necessitating the formation of District Educational Councils. Some Municipal Councils and Taluk Boards have already resolved to introduce free and compulsory education and levied an education cess. In February the Chief Scout Lieutenant-General Sir R. Baden Powell, V.C., inspected 1,500 scouts in Madras; his visit gave an impetus to this admirable organization.

Publicity Organization.—21. The reading-room and the library opened in the previous year attracted a large number of students and proved a success. The popularity of the bureau is beyond doubt; the number of inquiries received from the public was so enormous that the information bureau had to revise its method of indexing information in order to be able to cope with the work, while the number of honorary correspondents increased from 12,000 to 19,000. Four hundred and thirty-two news slips

and a hundred sets of leaflets on almost all subjects of popular interest and importance were issued during the year.

General Conditions.—22. Owing to the unfavourable monsoon in 1920 there was a partial failure of crops in Kurnool and an almost total failure in Bellary and Anantapur, and relief operations were started in all three districts. In Bellary and Anantapur no less than 2,575 square miles were seriously affected, and they were therefore declared famine areas. The rainfall in 1921, though late, has been generally ample, but it was impossible to close down all relief works by the end of December.

PART II

THE REPORT

CHAPTER I

PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES

1. *Vide* pages 1 to 10 of the Report on the administration of the Madras Presidency for the year 1911–12.

POLITICAL

HISTORICAL SUMMARY

2. *Vide* pages 11 to 33 of the Report on the administration of the Madras Presidency for the year 1911–12.

FORM OF ADMINISTRATION

3. *Vide* pages 34 to 54 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHARACTER OF LAND TENURES

4. *Vide* pages 55 to 60 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SURVEY

5. *Vide* pages 61 to 72 of the Report on the administration of the Madras Presidency for the year 1911–12.

SYSTEM OF SETTLEMENTS

6. *Vide* pages 73 to 86 of the Report on the administration of the Madras Presidency for the year 1911–12

CIVIL DIVISIONS OF THE BRITISH TERRITORY

7. *Vide* pages 87 to 100 of the Report on the administration of the Madras Presidency for the year 1911–12.

DETAILS OF THE CENSUS OF 1911—TRIBES AND LANGUAGES

8. *Vide* pages 101 to 104 of the Report on the administration of the Madras Presidency for the year 1911–12.

CHANGES IN THE ADMINISTRATION (1920–21)

9. The year witnessed important changes in administration by the introduction of the Reforms Scheme. The provisions of section 3 and other sections of the Government of India Act, 1919, relating to Provincial Executive Councils were brought into operation in the Presidency with effect from the 17th December 1920. The Hon'ble Sir Lionel Davidson, K.C.S.I., and the Hon'ble Mr. (now Sir) Charles George Todhunter, K.C.S.I., were reappointed, and the Hon'ble Khan Bahadur Muhammad Habib-ul-lah Sahib Bahadur, C.I.E., and the Hon'ble Mr. K. Srinivasa Ayyangar appointed as Members of the Executive Council and took upon themselves the execution of their offices with effect from the afternoon of the above-mentioned date. To administer transferred subjects the late M.R.Ry. Diwan Bahadur A. Subbarayalu Reddiyar Garu, M.R.Ry. Diwan Bahadur P. Ramarayaningar Garu and M.R.Ry. Rai Bahadur K. Venkata-reddi Nayudu Garu were appointed Ministers. The Hon'ble Diwan Bahadur Sir P. Rajagopala Achariyar Avargal, K.C.S.I., C.I.E., vacated his seat as a Member of the Executive Council and was appointed first President of the Madras Legislative Council.

HIS EXCELLENCY THE GOVERNOR'S TOURS

10. En route to Ootacamund in April 1920, His Excellency the Governor accompanied by Her Excellency visited the Kolar Gold Fields, Bangalore, Hosur and Mercara. Leaving Madras on the 8th April, Their Excellencies arrived at Ooregaum the next day, visited crushing mills and refining works and made a trip underground at Gifford's shaft, Champion Reef Mine. They also visited the Mining Companies' Hospital and the Mysore Government Electric Power Station. His Excellency had a discussion with the members of the Mining Board regarding the supply of timber. At Bangalore Her Excellency visited the Station Hospital and at Hosūr Their Excellencies inspected the various departments of the Remount Depot. Leaving Bangalore on the morning of the 11th April by motor for Mercara, Their Excellencies halted for the night at Mysore where they drove round in the afternoon, and arrived at Mercara on the 12th April. While there His Excellency received deputations of planters and Coorg landholders who discussed the development of road and railway communications with the Madras Presidency. A visit was also paid to the fort and the Hallery coffee estate. On the 14th April Their Excellencies motored from Mercara to Ootacamund via Manantoddy where they halted for the night. They arrived at Ootacamund on the 15th April visiting the Arapetta tea factory en route. On the 28th June His Excellency motored down to Coimbatore to preside at the distribution of prizes at the Forest College and stayed there till the 30th idem. Besides opening the Students' Club and visiting the Students' Hostels connected with the Forest College, His Excellency inspected the Agricultural College. The next tour was to the Madura and Rāmnād districts. Leaving Madras on the 18th July Their Excellencies arrived at Kodaikānal the next day,

where the municipal council presented an address. While at Kodaikānal Their Excellencies visited the St. George's Homes, the Convent Girls' School, the Observatory, the Belgian Convent and the College of the Sacred Heart. Madura town was the next to be visited, where Their Excellencies stayed on the 21st and 22nd July. The Madura Municipal Council and the District Boards of Madura and Rāmnād presented addresses. Their Excellencies visited several institutions of importance and opened the public playground attached to the Ponnagaram Mill School. From Madura Their Excellencies proceeded to Rāmēswaram where they visited the famous temple, and thence to Mandapam where they inspected the Ceylon Government Emigration Camp. Their Excellencies returned to Ootacamund on the 24th July. The last tour during 1920–21 which began on the 13th October was to the Anamalais, the Native States of Travancore and Cochin, and the Tinnevelly district. After spending two days at Valparai, where His Excellency studied planting conditions and observed the very considerable developments that had taken place in that part of the Presidency, he proceeded to Parambikulam, where he made a stay of two days. From Parambikulam His Excellency went down by the Cochin forest tramway to Chalakudi, where Her Excellency joined him on the 19th October. At Cochin Their Excellencies visited all the chief institutions including the Jews' synagogues and the Tata's oil mills. British Cochin was also visited, where His Excellency received an address from the municipal council and a deputation from the Cochin Chamber of Commerce. Their Excellencies then proceeded to Trivandrum making brief halts en route at the Periyār dam, Peermade, Kottayam and Quilon, and opening the Syrian Girls' School at Tiruvella. While at Trivandrum Their Excellencies made a tour of the most important public institutions and attended the Industrial Exhibition. During their sojourn in Travancore and Cochin Their Excellencies were the guests of the Rulers of the States and attended State banquets. State visits were also exchanged. After halting for a night at Cape Comorin Their Excellencies motored to Tinnevelly on the 29th October stopping on the way to open the new wing of the Salvation Army Hospital at Nagercoil. While in the Tinnevelly district Their Excellencies visited the towns of Tinnevelly, Palamcottah and Tuticorin. Addresses were received from the municipal councils of these places and from the district board. Besides visiting a number of municipal and public institutions Their Excellencies attended the prize distribution at the Hindu College and Her Excellency laid the foundation stone of two new wards of the Hospital for Women and Children at Tinnevelly. At Tuticorin His Excellency received a deputation from the Port Conservancy Board and the question of the future development of the port as a deep water harbour engaged his attention. Their Excellencies arrived in Madras on the 2nd November 1920.

RELATIONS WITH TRIBUTARY STATES

TRAVANCORE STATE

(M.E. 1095—16TH AUGUST 1919 TO 15TH AUGUST 1920)

[*Report on the administration of the Travancore State for the year 1095 M.E., 1919–20 A.D.*]

[The Maharaja, His Highness Sri Padmanabha Dasa Vanchi Pala Sir Rama Varma Kulasekhara Kiritapati Manne Sultan Maharaja Raja Rama Raja Bahadur Shamsher Jang, G.C.S.I., G.C.I.E., is a Kshatriya. His age is 64. He has a male heir. The area of the State is 7,625 square miles and the population, according to the census of 1911, is 3,428,975. The annual subsidy paid to the British Government is Rs. 8,10,652. The gross revenue is estimated at Rs. 1,85,47,920. The strength of the military force maintained during the year was 1,485]

11. M.R.Ry. Diwan Bahadur M. Krishnan Nayar Avargal was Diwan till the 7th July 1920 and M.R.Ry. Diwan Bahadur T. Raghavayya Pantulu Garu was appointed to that office with effect from the 8th idem. In General

November 1919 His Highness the Maharaja went on a tour to Madras to meet His Excellency the Viceroy and returned to the capital on the 3rd December 1919.

Revenue and finance

12. The total revenue of the State amounted to Rs. 1·85 crores, the highest figure on record, and the increase was shared by all the main heads of revenue, except "Forest" and "Salt." The ordinary expenditure also reached the record figure of Rs. 1·77 crores resulting in a surplus of Rs. 8·54 lakhs. Setting off this surplus against the capital expenditure on the Quilon-Trivandrum Railway which is not charged to revenue, there was a net surplus of Rs. 6·46 lakhs raising the Darbar's balance from Rs. 60 lakhs to Rs. 66 lakhs.

Protection and legislation

13. Four ordinary meetings of the Legislative Council were held during the year. Four Regulations were passed by the Council and two by His Highness the Maharaja. The constitution of the Council which was created by His Highness the Maharaja in 1888 and expanded ten years later was further revised on a representative basis by Regulation I of 1095 (M.E.). The maximum strength of the Council has been raised from 15 to 25. The Regulation provides a direct general electorate for the public at large as well as separate electorates for the janmis, planters, merchants and non-official members of municipal councils. The property qualification has been fixed low and the right to vote has been extended to women. The rights of interpellation and budget discussion have also been conceded to non-official members.

Police

The actual strength of the police force at the close of the year stood at 2,010 against a sanctioned strength of 2,045. The total number of cases of grave crime rose from 1,875 to 1,911 and there was an increase under all the heads except ordinary theft. The increase in murders was marked, the Trivandrum district contributing the largest number on record, viz., 24 against 8 in the previous year; they were for the most part the outcome of sudden quarrels.

Criminal justice

The number of courts that exercised criminal jurisdiction was 80 or 3 more than in the previous year. The number of offences reported rose from 21,844 to 22,940, of which 13,070 were offences under the Penal Code. The largest increase in the number of offences under the Penal Code occurred under the heads of ordinary mischief and theft. The percentage of conviction in respect of persons fell from 42 to 40. There was a fall from 460 to 294 in the number of juvenile accused. As usual, theft was the principal crime of which this class was convicted. The file of the magistracy rose from 21,844 to 22,940 and the arrears from 1,295 to 1,678. The average number of cases disposed of by a magistrate was 343 as against 340 in the previous year. The average duration of pendency fell from 53 to 45 in preliminary inquiries, while that in trials rose from 27 to 29 days. The number of cases committed to Sessions Courts was 173. Inclusive of those ordered to be re-tried or transferred from one court to another, the total number for disposal was 177, of which 14 were left undisposed of as against 2 in the previous year. In the High Court there were 13 referred cases and 167 appeals for disposal, inclusive of arrears, of which 12 and 143, respectively, were disposed of.

Prisons

The total prison population was 1,283. Eight hundred and thirty-seven prisoners were discharged, leaving at the close of the year 446 prisoners as against 455 in the previous year.

Civil justice

The year (1095 M.E.) exhibited a general decrease in the volume of litigation as compared with the previous year. So far as original litigation is concerned, 4,544 cases or 1,272 cases more than in the previous year were instituted in village panchayat courts; the total institutions in Munsifs' courts fell from 75,199 to 69,115, ordinary suits from 36,278 to 34,795 and small causes from 38,921 to 34,320; the number of ordinary suits instituted in District Courts rose from 801 to 844 and that of small causes fell from 78 to 33. The fall of civil litigation was purely confined to suits of the value of Rs. 500 and below. In regard to appellate work, the institutions in District Courts numbered 3,029: and in the High Court 376 first appeals and 551 second appeals were instituted as against 458 and 644, respectively, in the year previous. The total number of documents presented for registration rose from 293,719

to 327,165, which is the highest on record. This rise is attributed to the sudden and rapid development in the economic condition of the people brought about by the European war and the consequent increase of business transactions and activity among the people. The aggregate value of the transactions rose from Rs. 8·77 crores to Rs. 11·14 crores, i.e., by 27 per cent, while the average value per document rose from Rs. 299 to Rs. 341, i.e., by 14 per cent. The number of registrations relating to immovable property increased by 11 per cent while the value involved in them rose by 28 per cent, which is more or less conclusive proof of the increase in the value of land. Registration

14. The season was on the whole not favourable to agriculture. The prices of food-grains and the wages of labour were generally higher than in the previous year. The average rainfall was 108·57 inches or 18·34 inches more than in the previous year. Manurial experiments on paddy and on coconut were conducted as in previous years on an extensive scale in different parts of the State with very beneficial and interesting results. Experiments with tapioca, cotton, cholam, groundnut, fodder crops, pepper, bananas and sweet potatoes were carried on during the year. A scheme for opening an Agricultural Middle School for the training of practical farmers was sanctioned during the year. The State has a gratifying record of agricultural progress achieved in various directions. The Departments of Fisheries and Industries also did useful work. At the end of the year there were 123 factories as against 117 in the previous year. The total volume of the external trade was Rs. 10·32 crores as against Rs. 9·04 crores. The value of exports was Rs. 5·76 crores or 55·8 per cent and that of imports Rs. 4·56 crores or 44·2 per cent of the total volume of trade, the percentages in the previous year being 62·81 and 37·19, respectively. As usual, the bulk of the trade was with British India. The total expenditure on Public Works amounted to Rs. 32·67 lakhs as against Rs. 27·80 lakhs in the previous year. **Production and distribution** Agriculture Factories Trade Public works

15. The total number of births registered was 66,366 and the total number of deaths was 65,888 as against 66,683 and 74,739, respectively, in the previous year. The birth and death rates were 19·4 and 19·2 per mille, respectively, as against 19·4 and 21·8 in the preceding year. The total number of vaccinations performed during the year was 228,503 as against 215,243 in 1094 M.E. The number of infantile vaccinations rose from 12,104 to 13,013. Twenty-eight hospitals and 31 dispensaries or one more dispensary than in the previous year were maintained during the year, exclusive of the Leper and Lunatic Asylums and the Contagious Diseases Hospital. The number of in-patients in all the State institutions was 18,783 against 19,620 and that of out-patients 842,523 against 836,093 in the previous year. **Vital statistics and medical services** Vaccination Medical relief

16. The year was one of steady progress in the development and expansion of English school education and the public evinced keener interest in the education of girls. The total number of recognized institutions rose from 2,845 to 2,939 and their strength from 365,868 to 375,974. The total population of the State, according to the census of 1911, was 3,428,975 and taking 15 per cent of this figure to be of the school-going age, the percentage of children attending recognized schools alone was 73·09 as against 71·13 in the previous year. The number of collegiate institutions affiliated to the Madras University was five as in the previous year, but their strength rose from 1,090 to 1,154. The number of recognized English schools increased from 102 to 114 and their strength from 26,931 to 32,096. **Education**

COCHIN STATE

(M.E. 1095—16TH AUGUST 1919 TO 15TH AUGUST 1920)

[*Report on the administration of the Cochin State for the year 1095 M.E.*]

[The Maharaja, His Highness Sri Sir Rama Varma, G.C.I.E., is a Kshatriya. He is 62 years of age and has male heirs. He pays a tribute of Rs. 2,00,089 and maintains a military force of 289 men. According to the census of 1911, the population of the State was 918,110. The gross revenue was Rs. 63 lakhs. The Resident for Travancore is the Resident for Cochin]

General and political

17. His Highness the Maharaja attended the Conference of Ruling Princes and Chiefs held at Delhi in November 1919 and visited several places of importance and interest before he returned to the State on the 13th December 1919. Peace celebrations were held throughout the State on a scale worthy of the occasion.

Revenue and finance

18. The State revenue rose from Rs. 53·03 lakhs to Rs. 63·21 lakhs and the expenditure from Rs. 52·84 lakhs to Rs. 59·48 lakhs, resulting in the rise of the Darbar's balance from Rs. 26·98 lakhs to Rs. 30·72 lakhs. Practically, the whole of the increase in revenue was due to a series of windfalls under "Miscellaneous," "Abkāri and Ganja," "Railway," "Land Revenue," "Stamps," "Education" and "Registration." The increase under "Miscellaneous" alone amounted to Rs. 4·18 lakhs, being solely due to the profits realized on account of the sale of Burma rice. The expenditure for the year is the highest on record because advantage was taken of the windfalls under receipts to execute some important works which had been postponed from year to year for want of funds. The increases in expenditure occurred principally under Public Works (Rs. 4·24 lakhs), Education (Rs. 1·26 lakhs), Medical (Rs. 1·11 lakhs), Railway (Rs. 0·74 lakh), Agriculture and Fisheries (Rs. 0·64 lakh), Scientific, etc., departments (Rs. 0·43 lakh), Miscellaneous (Rs. 0·31 lakh) and Tramway (Rs. 0·30 lakh).

Protection and legislation

19. Twenty Regulations were passed and three Proclamations were issued during the year by His Highness the Maharaja. The department of police was reorganized and the police force consisted of 86 officers and 497 men, as against 89 officers and 498 men in the previous year. There was an appreciable decrease in the number of cases of grave crime and no case of piracy was reported. The total number of cases reported during the year under the Penal Code and local and special laws fell from 1,181 to 1,009. This, together with the 40 cases with which the year opened, made a total of 1,049 cases for police investigation, against 1,199 in the previous year, of which 97·8 per cent was disposed of. The percentage of conviction of cases charged before the courts also fell from 87·4 to 82·4. The average cost of a policeman was Rs. 219·41 against Rs. 212·02 in the previous year. Including arrears, the number of cases for disposal by magistrates fell from 3,094 to 2,889, of which 2,764 were disposed of as against 2,948 in the previous year. The percentage of conviction fell from 30·3 to 27·5. Of the persons on whom appealable sentences were passed by the second-class magistrates, 28·8 per cent preferred appeals against 27·9 per cent in the previous year. The percentage of confirmation fell from 44·2 to 43·9. The Sessions Judges had for disposal 48 appeals against 59 in the previous year, of which 41 were disposed of. The Chief Court had for disposal 30 appeals against 28 in the previous year, of which all but two were disposed of. Including the newly-opened sub-jail at Nemmara, there were 9 prisons against 8 in the previous year. The daily average number of prisoners was 170·21 against 185·80 in M.E. 1094. The number of courts that exercised original jurisdiction increased, by one, to 29. Suits instituted and appeals filed in the year numbered 18,263 and 903 against 18,107 and 818, respectively, in the previous year and 18,413 suits and 811 appeals were disposed of against 17,434 and 956 in M.E. 1094. In Munsifs' courts the pendency decreased from 2,500 suits to 2,364 suits. Including arrears, District Judges had 865 appeals for disposal and disposed of 564, leaving 301 at the close of the year as against 241 in M.E. 1094. The Chief

Police

Criminal justice

Prisons

Civil justice

Court began the year with 173 appeals, received 279 and disposed of 247, leaving 205 at the close of the year. There was a steady increase in the number of registrations as well as in the receipts of that department. The number of registration offices at the close of the year was 25 as against 24 in the previous year and the number of documents registered rose from 57,563 to 61,618. Twenty joint-stock companies were registered during the year. Registration

20. The total area under cultivation during the year rose, by 216 acres, to 502,446 acres. The total current demand for the year under Land Revenue proper was almost the same as in the previous year. The aggregate demand amounted to Rs. 12·16 lakhs as against Rs. 11·65 lakhs in the year previous. The percentage of collection to the current demand was 99·97. **Production and distribution** Land revenue

The Department of Agriculture gave help to agriculturists in diverse ways. The development of the Central farm which was opened in M.E. 1092 continued to engage careful attention. Besides the issue of manures from the State depots at cheap cost with advice as to their application, demonstrations were held by the department in tillage operations with improved ploughs manufactured in the Central farm. Though ten co-operative societies, or two less than in the previous year, were registered, the transactions of the societies showed a considerable increase. As in previous years, most of the loans issued by the agricultural societies were for productive and useful purposes and these amounted to Rs. 1·88 lakhs as against Rs. 1·44 lakhs in the previous year. The State forests continued to be worked on contract system. To ensure better management, the village reserves which had been under the dual management of the Land Revenue and Forest Departments were placed entirely under the control of the former. As regards tramway there was no change in the total length of the permanent way opened up for traffic. The cost of maintenance was almost the same as in the previous year. The expenditure on State works, including establishment charges, was Rs. 11·88 lakhs as against Rs. 7·64 lakhs in the previous year. The gross earnings of the railway amounted to Rs. 9·75 lakhs as against Rs. 8·92 lakhs in the year previous and the net earnings gave a return of 5·04 per cent on the capital outlay as against 5·66 per cent in the previous year. Agriculture Co-operative societies Forests Tramway Public works Railway

21. Public health during the year was better than in the previous year. The total number of births registered increased from 13,742 to 14,216 and there was a fall in the number of deaths. The ratios of births and deaths during the year per mille of the population were 15·48 and 14·68, respectively, as against 14·97 and 21·91, respectively, in the previous year. The Medical Department was reorganized and there was no change in the number of medical institutions in the State. There was a slight increase in the number of in-patients and a slight decrease in the number of out-patients treated in these institutions. **Vital statistics and medical services** Medical relief

22. Education continued to make progress. Though the total number of Sirkar schools fell from 163 to 160, the number of aided schools rose, by 37, to 273, and the total number of pupils in both classes of institutions rose further from 67,090 to 75,778. The number of high schools increased from 25 to 28, of which 19 were Sirkar institutions as against 18 in M.E. 1094. The number of schools in which lower secondary instruction was imparted rose from 53 to 61. Primary education was imparted in 1,005 schools as against 953 in the previous year. Increased encouragement was given to the education of the backward classes ; several new schools specially intended for them were opened and all schools in the State were thrown open to them. **Education**

PUDUKKŌTTAI STATE

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[Report on the administration of Pudukkōttai for fasli 1330]

[The Raja, His Highness Sri Brihadamba Das Raja Sir Mārtanda Bhairava Tondaiman Bāhadur, G.C.I.E., is a Kallar by caste and is 45 years of age. The population of the State, according to the census of 1921, is 426,813. The Raja pays no tribute and maintains a military force of 110 infantry and 19 cavalry. The Collector of Trichinopoly is ex-officio Political Agent for the State.]

General and political

23. His Highness the Raja returned to India on the 1st January 1921. After spending some time in Madras, he attended the inauguration of the Chamber of Princes at Delhi in February and proceeded to Europe, sailing from Bombay on the 19th of that month. The administration of the State under His Highness the Raja is carried on by a Council consisting of an officer of the Indian Civil Service, who is styled the State Superintendent, the Diwan and an ex-officio Councillor. The various departments are constituted on the lines of those in British India. The Representative Assembly which was instituted in 1902 consists of 30 members, 25 of whom are elected and 5 nominated. It meets twice a year when the Darbar gives it an account of the progress made in the several departments of the State, replies are given to interpellations by the members and a discussion is held on the suggestions brought forward by them. There is also a Legislative Advisory Council which consists of the members of the State Council, the State Vakil, four members elected by the members of the Representative Assembly and two non-official members nominated by His Highness. The Council is, as its name indicates, a purely advisory body. It has recently been given the privileges of discussing the budget and bringing in bills for consideration. It has also been accepted that no law, except in cases of emergency, will be brought into force without its being first discussed before the Council.

Revenue and finance

Land revenue

24. The total receipts of the fasli amounted to Rs. 21·43 lakhs or an increase of Rs. 0·18 lakh over the figures of the previous year. The current demand under Land Revenue proper was Rs. 9·99 lakhs, of which Rs. 9·78 lakhs or 97·96 per cent was either collected in the fasli or written off or adjusted from the excess collections of previous fasli, as compared with a collection of 98·81 per cent in fasli 1329. The total expenditure rose from Rs. 18·14 lakhs to Rs. 20·66 lakhs, the increase being mainly due to the higher pay sanctioned to all officers in the general revision and also to a larger expenditure by the Public Works Department. The transactions of the fasli thus resulted in a net surplus of Rs. 0·77 lakh. The opening balance was Rs. 38·25 lakhs and the closing balance Rs. 39·03 lakhs. The surplus went to increase the State's investments in war loan and bonds and in fixed deposits in the Imperial Bank, Trichinopoly.

Production and distribution

Season and crops

25. The year was a fairly prosperous one for the agriculturist. The total rainfall reached the hitherto unrecorded figure of 60·44 inches. In November 1920 and January 1921 heavy floods occasioned by excessive rainfall caused widespread devastation of crops, damage to fields, destruction of property and loss of cattle. The ryots were, however, able to raise a second crop which yielded a fair outturn. The prices of staple foodgrains went down in most parts of the State. Pasture was available everywhere. Fodder was sufficient and the condition of cattle was good. A net area of 2,390 acres was added during the year to ryotwari holdings. Towards the close of the fasli a committee of seven members was organized with the Diwan Peishkar as President to suggest means and measures for the spread of agricultural education among the people. Five new co-operative credit societies were registered during the year, thus increasing their total number to 40. Three of the five new societies did not actually commence work till after the close of the fasli. There was considerable improvement in the working of the Public Works Department. As compared with fasli 1329, the expenditure on "Irrigation" increased by

Public works

nearly 90 per cent and that on "Communications" by nearly 50 per cent. Many new roads were formed both by the State and by private agencies.

Protection and legislation

26. The Legislative Advisory Council met five times during the fasli and discussed nine draft Regulations. Six Regulations were passed during the fasli. A Proclamation under the Sign Manual of His Highness was also issued prohibiting the entry into the State of a political agitator.

Police

There was no change in the constitution of the State police force which at the close of the fasli was only two short of its sanctioned strength. The efficiency and discipline of the force showed considerable improvement and a beginning was made of putting the constables through a course of firing practice. The total number of offences of all kinds reported fell from 1,935 to 1,538 and that of cognizable offences and cases investigated by the police from 528 to 395. The percentage of cognizable cases detected rose from 34 to 36, whereas that of cases in which property was recovered fell from 27 to 17.

Criminal justice

The improvement in the work of the magistracy was sustained during the year. The total number of cases for disposal in magistrates' courts fell from 4,787 to 4,603. The percentage of disposal was almost the same as in the previous year, but the average duration of cases fell from 15·14 to 12·32 days.

Prisons

The number of prisons rose from 8 to 9. The total jail population including the year's admissions numbered 715, of which 587 were discharged leaving at the close of the fasli 128 prisoners. The health of the prisoners was good and there was a marked fall in the number of jail offences. There was a perceptible improvement in the discipline in the Central Jail and religious and moral lectures were delivered to the convicts who chose to hear them.

Civil justice

There was an increase in the volume of fresh litigation during the fasli, both original and appellate : and the percentage of increase was 3·77 as against 7·28 in the previous year. The number of regular suits for disposal was 3,061 and of these 76·18 per cent were disposed of as against 80·60 per cent in fasli 1329. The number of small cause suits for disposal by Judges rose from 1,264 to 1,622 : and the increase was due to the fact that, with effect from the 1st January 1921, the pecuniary limit of the small cause jurisdiction of the Chief Court was raised from Rs. 100 to Rs. 200. The total number of regular appeals for disposal rose from 275 to 319, but there was a marked fall in the percentage of disposal from 72·72 to 45·45. The general fall in the percentage of disposals was mainly due to the fact that during the floods in November 1920 and January 1921 parties and witnesses were prevented from attending courts by the damage caused to communications. Another contributory cause was the dislocation of work occasioned by the redistribution of jurisdiction of the rural Small Cause Courts consequent on the abolition of two Small Cause Courts at the beginning of the second quarter of the fasli.

Vital statistics and medical services

27. Public health was good throughout the fasli, though cholera and smallpox were, as usual, prevalent sporadically. The taking of the census was carried out in March 1921 and the total population recorded was 426,813 (205,033 males and 221,780 females) as compared with 411,866 (196,566 males and 215,320 females) recorded in 1911. The population of the town of Pudukkōttai showed a decrease of 1,842. The total number of births registered was 8,905 or 20·86 per mille of the population as against 20·75 per mille in the previous fasli. The total number of deaths was 7,809 or 18·28 per mille of population as against 21·66 per mille in the previous fasli. Infantile mortality continued to be excessive. The number of still-born children also increased by 114. This high rate of mortality is attributable to the strange but strong prejudice of the people against engaging the services of qualified midwives during confinement in preference to the ill-educated traditional barber women. The total number of patients who underwent treatment in all the medical institutions was 134,594 or 11,350 more than that of the previous year. The daily average attendance of patients rose from 747·56 to 833·93. Arrangements were made in the closing month of the fasli to start an Ayurvedic dispensary at the capital and it has begun to work with a doctor who has studied in the Ayurvedic College, Madras, and passed an examination. The number

of cases vaccinated rose from 11,486 to 13,056 and the percentage of successful cases from 85·63 to 94·48.

Education

28. The number of educational institutions at work in the State increased from 480 to 492 and that of pupils under instruction from 24,263 to 24,508. There was one school for every 3·39 square miles and for every 867 persons of the population. Elementary education is free throughout the State except for boys at the capital; special attention was devoted to improve the quality of instruction imparted in elementary schools. Free secondary education was imparted to boys in one school and to girls in another. The State Education Code and the Inspection Code were revised and brought into force during the fasli. There is one college in the State and it maintained its level of efficiency during the year.

BANGANAPALLE STATE

[*Administration Report of the Banganapalle State for the current year 1920-21*]

[Nawab Saiyid Ghulam Ali Khan Bahadur, a Muhammadan of the Shiah sect, is the Ruler of the State. He is 46 years old and has male heirs. He pays no tribute and maintains no military force. He holds a commission as a Lieutenant in His Majesty's Land Forces. The population of the State is 36,646. The Collector of Kurnool is Political Agent]

General and political

29. The Nawab was granted a permanent salute of nine guns and admitted to the Chamber of Princes, Delhi. He went to Madras in January 1921 on the occasion of the visit of His Royal Highness the Duke of Connaught and in March 1921 he visited Bombay to bid farewell to His Excellency Lord Chelmsford and to take part in the welcome of His Excellency Lord Reading. His eldest son, Mir Fazle Ali Khan Bahadur, after a brilliant career of eight years in the Mayo College, Ajmere, successfully passed the Diploma examination and joined the Post-Diploma class. The second and third sons, Mir Inayath Ali Khan and Mir Fateh Ali Khan, continued to make good progress in the same College.

Revenue and finance

30. The total receipts were Rs. 2·56 lakhs as against Rs. 2·65 lakhs in the previous year. Decreases occurred principally under "Land Revenue, Quit-rent and Miscellaneous," "Road Cess" and "Stamps and Registration." The fall under the first two heads was due to time being given to the ryots for the payment of their dues. The total expenditure rose from Rs. 2·64 lakhs to Rs. 3·32 lakhs.

Protection and legislation

31. The volume of crime decreased considerably during the year as compared with previous years. Only 80 offences were registered as against 133 in the previous year. As in last year, detection work was poor and the recovery of stolen property was not satisfactory.

Production and distribution

32. Owing to the deficiency in rainfall (16·57 inches as against 30·85 inches in the previous year) there was almost a total failure of crops in 8 and partial failure in 10 villages, and the difficulties of the ryots were increased by the dullness of the cotton market. Prices of food-grains were high in the State as elsewhere. Census operations were completed and the population of the State totalled 36,646 against 39,344 of the previous decade. The decrease is due to the low birth-rate during the decade, to high mortality from influenza in 1918 and to the emigration of families whose houses were destroyed by the floods of 1916.

Vital statistics and medical services

33. Public health during the year was satisfactory. The number of births and deaths stood at 749 and 634 as against 855 and 865, respectively, in the previous year. The average daily number of out-patients treated during the year was 82·41 and of the in-patients 7·9, making a total of 90·31 against 94·14 in the previous year. There was a satisfactory increase from 1,266 to 1,890 in the total number of cases vaccinated and some improvement in the proportion of successful vaccinations.

Education

34. Education is imparted free throughout the State and a few scholarships are given for higher education. Three new schools were

opened during the year. Grants-in-aid were given to nine mission and four private schools. The total number of pupils under instruction in all the schools in the State rose from 1,407 to 1,531 and the average daily attendance from 965 to 1,087. The results of the annual examinations were satisfactory.

SĀNDŪR STATE

[*Administration Report of the Sāndūr State for the official year 1920–21*]

[The Raja of Sandur, Raja Srimant Venkata Rao, Rao Sahib, Hindu Rao Ghorapade Mamlukatmadar, Senapati, is a Mahratta. He is 29 years of age. He pays no tribute and maintains no military force. The area of the State is 167 square miles and the population, according to the census of 1921, is 11,686. The Collector of Bellary is ex-officio Political Agent and exercises a general supervision over the administration]

General and political

35. The Raja visited Jath and Gwalior in the months of April and September 1920, respectively, on invitations from the Chiefs of those States. He also visited Madras during January 1921 on the occasion of the visit of His Royal Highness the Duke of Connaught with whom he had an informal interview. M.R.Ry. K. Hanumanta Rao Pantulu Garu, Deputy Collector, whose services were lent to the State by the Madras Government, took charge of the appointment of Diwan on the 4th June 1920.

Revenue and finance

36. The receipts from all sources amounted to Rs. 1,02,943 as against Rs. 99,692 in the previous year. The expenditure amounted to Rs. 2,30,770 chiefly because of a liquidation of the Raja's debts and the expenses incurred by the Raja and the Rani in visiting Madras.

Protection

37. There was a slight fall in the number of offences committed, from 39 to 36. The value of property lost and recovered during the year was Rs. 2,252 and Rs. 748 against Rs. 3,854 and Rs. 207, respectively, in the previous year.

Courts

The Diwan exercised first-class magisterial powers and the powers of the Additional Sessions Judge. He dealt with 118 cases during the year as against 88 in the previous year. Out of 313 persons involved in these cases, 156 were convicted and 157 were discharged. There were two appeals filed in the Raja's Court against the Diwan's decision : and the decision was reversed in one and amended in another. As District Munsif, the Diwan dealt with 88 cases as against 66 in the previous year and disposed of 81; there were no cases of appeal.

Jail

The expenditure on the maintenance of the State prison rose from Rs. 361 to Rs. 763. There was, however, a corresponding rise, from Rs. 128 to Rs. 358, in the earnings of the prisoners and these were, as usual, credited to State funds. The health of the prisoners suffered in no way and their conduct was uniformly good.

Production and distribution

38. Though the total quantity of rainfall was only 30·24 inches as against 43·98 inches in the previous year, the yield of the crops was better, the rains being timely. The average yield of cholam—the staple food-grain of the State—ranged from As. 12 to As. 14. The labouring classes were mostly employed in agricultural operations and in grass and fuel cutting in forests. Much of the grass cut in the State is taken for military purposes. The General Sāndūr Mining Company which suspended work during the war began operations in the latter part of the year and by the 31st March was employing 70 labourers. The prices of cholam and cumbu in March were 10·77 and 10·98 seers per rupee as against 6·44 and 5·70 seers, respectively, in March of the previous year, the fall in price being due to restrictions laid on the export of grain from the State. The total forest receipts amounted to Rs. 31,192 as against Rs. 29,436 in the previous year. The ryots are allowed free grazing for heir cattle and are also privileged to cut wood for agricultural purposes, free of seigniorage, under permits issued in the Diwan's office.

Vital statistics and medical services

39. The census undertaken in March showed the total population of the State to be 11,686 as against 13,526 on the previous occasion. The decrease was largely due to the closure of the mines which formerly employed a large number of coolies from outside and to the outbreak of influenza in 1918-19 which worked havoc among the people. Public health throughout the year was good. The number of births was 332 and the number of deaths 217 as against 365 and 382, respectively, in the previous year. The ratios of births and deaths were 26 and 28 per mille, respectively. In the State dispensary at Sāndūr 10,407 persons received relief against 9,474 in the previous year, the average daily attendance being 70·26 against 74·36. The most common diseases treated were malaria, rheumatism, disorders of the digestive system and respiratory affections.

Education

40. The old Elementary School at Sāndūr was raised to the status of a Middle School. Education was made free in all village schools, and the number of children on the rolls in all the State schools increased, by 36, to 459 and the cost of education from Rs. 2,277 to Rs. 3,311.

CONDITION OF THE PEOPLE

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Season and Crop Report for fasli 1330; Department of Statistics, India; Prices and Wages in India*]

41. The stocks of grains were generally sufficient and there were no tracts requiring special notice on the ground of any permanent lowering in the standard of agricultural prosperity. The harvest prices of the principal food-grains were generally below the level of those prevailing in the previous fasli : and, in spite of this, wages continued to be high, leaving a larger margin of saving for the labour classes. The situation in the districts of Bellary and Anantapur was generally unsatisfactory owing to the unfavourable character of the season, the failure of the cotton crop and the very low prices realized therefor. There was considerable scarcity of fodder in the Circars and the Deccan, but the situation did not prove as bad as was once apprehended.

POLITICAL PENSIONS (1920-21)

42. Under the latest orders of the Government of India, political pensions should include only those granted to non-officials whose services, descent or connexions are such as to render it desirable on general grounds of policy to extend to them some measure of assistance or recognition. The political pensions in force on the 1st April 1920 amounted to Rs. 2,66,286-10-0 and were distributed among 454 pensioners. During the year, pensions amounting to Rs. 6,998 were newly sanctioned and the amount that lapsed was Rs. 5,118-9-0. There were no cases of transfer of pensions from or to other Provinces. Eighteen pensioners died during the year, whereas 36 new pensioners were added to the list. The pension of only one person was commuted in full. In one case, the lapse was by resumption. The pensions in force on the 1st April 1921 amounted to Rs. 2,68,166-1-0 and were distributed among 470 pensioners. The payments made to the Carnatic stipendiaries and the Tanjore family aggregated Rs. 1,97,035-8-3 and Rs. 30,244-9-0, respectively. The former amount includes a sum of Rs. 2,968, being the commuted value of the pension above referred to.

CHAPTER II

ADMINISTRATION OF THE LAND

REALIZATION OF LAND REVENUE

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Report on the settlement of Land Revenue for fasli 1329; Statistics of British India, Vol. II—Financial Statistics, Part II—Land Revenue*]

Sources of land revenue

43. The land revenue of the Madras Presidency is derived from the following sources, viz., (1) Peshkash or revenue from permanently-settled estates, (2) Shrotriyam jodi or quit-rent levied on inam villages, (3) Assessment including water-rate on lands held under the ryotwari system, (4) Miscellaneous revenue, and (5) Proprietary Estates' Village Service. The total current demand under Land Revenue and Cesses amounted to Rs. 797·51 lakhs as against Rs. 761·13 lakhs in the previous fasli, of which 97 per cent was collected within the fasli. The revenue from peshkash was almost the same as in the previous year (Rs. 49·89 lakhs), whereas that from shrotriyam jodi rose slightly from Rs. 7·56 lakhs to Rs. 7·57 lakhs. The net ryotwari demand, excluding remissions but including water-rate, second-crop charge and miscellaneous revenue, amounted to Rs. 657·53 lakhs against Rs. 622·38 lakhs in the previous year. The total extent of ryotwari holdings during the year was 26·02 million acres which exceeded the extent of the previous year by 58,811 acres. The increase was contributed to by all the districts excepting Gōdāvari, Kistna, Guntūr, Nellore, Cuddapah, Kurnool and Bellary and was marked in North Arcot, South Kanara and Malabar. The total assessment on holdings again rose, by Rs. 2·85 lakhs, to Rs. 533·99 lakhs. Vizagapatam and North Arcot alone were responsible for an increase of Rs. 2·03 lakhs, which was due in Vizagapatam to the introduction of resettlement rates during the year and in North Arcot to the assignment on patta of lands previously held on sivaijama. Including the area under "Miscellaneous cultivation", the total area cropped on ryotwari holdings during the year was 20·92 million acres as against 19·96 million acres in the previous year. The area under wet, 4,861,606 acres, showed an increase of 311,910 acres and that under dry, 15,135,993 acres, an increase of 591,569. The revenue from water-rate and second-crop charge rose, by Rs. 8·52 lakhs, to Rs. 39·44 lakhs. As compared with the previous year, there were heavy decreases under the several heads of remissions except under "Injury by floods" and "Beriz deductions." The net decrease amounted to Rs. 20·26 lakhs and was due to the more favourable character of the season. The receipts under "Miscellaneous revenue" rose, by Rs. 3·52 lakhs, to Rs. 99·06 lakhs and the current demand under cesses from Rs. 75·10 lakhs to Rs. 76·06 lakhs. The total balance of land revenue and cesses outstanding at the end of the fasli, including both arrears and current, was Rs. 20·72 lakhs as against Rs. 23·51 lakhs in the previous fasli.

Peshkash

Shrotriyam jodi

Ryotwari

Remissions

Miscellaneous revenue

Cesses

Collections

44. Up to the end of November 1920, Rs. 15·49 lakhs had been collected and the net recoverable balance on the 1st December 1920 was Rs. 4·46 lakhs. The charges of district administration, including salaries and allowances of revenue inspectors but excluding those of village establishments, were Rs. 62·58 lakhs, or 8·05 per cent of the land revenue and cesses realized as against 7·8 per cent in the previous year. Including

village service charges, which amounted to Rs. 74·28 lakhs, the total charges were Rs. 136·86 lakhs or 17·6 per cent of the collections of land revenue and cesses.

Coercive processes

45. The total number of coercive processes issued during the fasli (816,407) for the realization of Government dues was the lowest for the last ten years; the fall shows that the revenue was collected with ease. The number of sales was, however, in excess of the number in the three previous faslis. It was to some extent due to the stringency of the money-market and to the unwillingness of ryots to retain unprofitable lands. The percentage of actual sales to sale notices was 14·53 against 12·54 in fasli 1328 and the percentage of defaulters whose property was actually sold to the total number of pattas was 0·12 against 0·10 in the preceding fasli. Immovable property of the estimated value of Rs. 7·08 lakhs was sold for the recovery of arrears amounting to Rs. 0·81 lakh, and realized Rs. 1·63 lakhs, the corresponding figures for the previous year being Rs. 2·40 lakhs, Rs. 0·49 lakh and Rs. 0·85 lakh. The total area of land bought in by Government for want of bidders was 5,061 acres of dry and 1,431 acres of wet against 5,567 acres of dry and 456 acres of wet in fasli 1328.

Transfer of registration

46. Applications for transfer of revenue registration received through officers of the Registration Department increased, by 68,940, to 363,968: those presented direct to Revenue Officers, by 3,633, to 58,134: and the number of cases which Revenue Officers dealt with on their own initiative fell from 21,375 to 16,911. The total number of applications for disposal including the previous year's pendency was 595,919, of which 200,303 were left pending at the close of the fasli as against 154,200 in the previous fasli. Of the number disposed of, 16,246, or 4·11 per cent, were rejected.

Loans and advances

47. The advances made during the year under the Land Improvement Loans Act and the Agriculturists' Loans Act were Rs. 4·17 lakhs in excess of those in fasli 1328. The increase was largest (Rs. 1·25 lakhs) in Tanjore, where the season in the previous fasli was adverse. Of the sums repayable during the year under these Acts on account of principal, 80·3 per cent under the former and 66·1 per cent under the latter were collected as against 84·9 and 77·9 per cent in the previous year. The aggregate amount of principal and interest repayable under both the Acts was Rs. 14·53 lakhs as against Rs. 12·76 lakhs in the previous fasli, of which about 27·8 per cent was collected without resort to coercion and 42·8 per cent after the issue of demand, the percentages of the previous fasli being 26·6 and 48·3, respectively. The balance outstanding at the end of the year was Rs. 4·05 lakhs as against Rs. 2·42 lakhs in the previous fasli.

SURVEYS (1920–21)

[*Report on the administration of the Survey, Settlement and Land Records Departments for the year 1920–21.* (*G.O. No. 2657, Revenue, dated the 3rd December 1921*)]

Parties

48. The number of survey parties at the commencement of the year stood, as in previous years, at six, five of which were employed in ryotwari areas and the sixth in estates. Two additional temporary survey parties were organized in the early part of the year, one No. VII Party for the survey of the Sivaganga zamindari, and the other No. VIII Party for the resurvey of the Wynaads, with headquarters at Sivaganga and Cannanore, respectively. There were thus eight parties working at the end of the year. No. I Party was at work in Gōdāvari and Kistna; No. II Party—the estate survey party—finished its operations in the north, its principal field of operations lying in the Venkatagiri zamindari where it had been at work for the last five years, and moved

into Rāmnād towards the close of the year to take up the survey of that zamindari ; No. III Party was at work in South Arcot ; No. IV Party in Trichinopoly and Tanjore ; No. V Party in South Arcot and Tanjore ; and No. VI Party in Tanjore. The town survey detachment of No. I Party was mainly engaged on the survey of unions in the Kistna district and it has since been merged in the party.

Operations

49. The main work of the department was, as usual, the cadastral resurvey of ryotwari areas. The total outturn under this head was 2,063 square miles against the forecast of 2,025 square miles. According to the forecast for the year, 60 square miles of Government lands were due for cadastral survey, but the outturn was only 5·9 square miles ; this was due to the postponement of the original survey of 54 square miles in the Agency villages of the Pōlavaram and Yellavaram divisions. The block survey of certain whole inam villages in the Madura district, covering an area of 22 square miles, was completed. The joint verification of the Franco-British boundary was made during the year in the South Arcot district and was in progress in the Tanjore district. The survey of the Trichinopoly Cantonment for military purposes was completed. In the districts of Malabar and the Nilgiris, the progress of resurvey of the Wynaads was much handicapped on account of the unhealthiness of the tract, scarcity of labour, heavy rain, leeches and forest growth. Five subordinates died of malaria and there were also a few cases of melancholia induced by it. Nevertheless, a total outturn of 614 square miles or 14 square miles in excess of the forecast was realized. Another important item of the work of the department was the survey of estates. The proprietors and the tenants of both big zamindaris and small scattered estates are realizing the advantages of an accurate survey and applying for the survey of their lands. Amongst the large zamindaris in the northern districts, Kallikōta-Atagāda, Pithāpuram, Punganūr, Venkatagiri and Kangundi have already been surveyed. The survey of the zamindaris of Rāmnād and Sivaganga in the Rāmnād district was undertaken at the request of the Raja and the Court of Wards, respectively. The party specially organized for the survey of the latter zamindari commenced work in June 1920 ; the work in Rāmnād was taken up in January last by No. II Party and an extent of 85 square miles was completed in the short period of three months. During the year, an area of 361 square miles was surveyed in nine estates against 278 square miles in the previous year and against a forecast of 273 square miles. Besides these, 1·77 square miles were completed in four municipalities. The shortage in the area of towns under special cadastral survey was due to the financial unpreparedness of municipalities in general. The survey of streets in 64 unions in eight districts was completed and was in progress in four more ; the balance of 42 linear miles of roads in the Arni Jaghir of the North Arcot district was also surveyed.

Ryotwari areas

Estates

Towns and unions

Central Office

50. The area of village maps printed during the year was 2,443 square miles, inclusive of 476 square miles of non-Government villages and 51 square miles of Coorg. The arrears of printing in regard to village maps were 1,949 square miles as against 1,612 square miles in the preceding year. Other maps printed during the year included touring maps of districts, taluk maps and street survey maps of unions. The cost of general maps sold to the public during the year was Rs. 4,010-10-9 as against Rs. 3,811-5-6 during 1919-20 and Rs. 2,556-4-6 during 1918-19. The demand for such maps is steadily on the increase. The Madras Survey Manual was revised and is in the press ; its final form awaits the passing of the Revised Survey Bill which is under consideration.

Finance

51. The gross expenditure was Rs. 16·80 lakhs as against Rs. 13·66 lakhs in the preceding year, the excess being due to the revision of salaries of establishment and the formation of two new parties ; Rs. 12·09 lakhs was chargeable to Government and Rs. 4·71 lakhs to proprietary estates, municipalities and other sources, the corresponding figures for the previous year being Rs. 10·52 lakhs and Rs. 3·14 lakhs, respectively.

SETTLEMENTS (1920–21)

[*G.O. No. 2657, Revenue, dated the 3rd December 1921*]

Parties

52. All the five settlement parties which were at work at the end of the previous year continued their operations—Party No. I in the Tanjore district, Party No. II in the South Arcot district and in the Tiruvannāmalai taluk of the North Arcot district, Party No. III in Bellary and Anantapur, Party No. IV in Madura, Rāmnād and Trichinopoly and Party No. V in Ganjām, Vizagapatam and Kistna. The Special Settlement Officer employed in connexion with the resettlement of the Nilgiris and Malabar Wynaads continued to work throughout the year. Four Assistant and two Deputy Collectors were trained in No. III Party and two Assistant Collectors in No. I Party in the various items of special staff and settlement work.

Operations

Ganjām

53. In Ganjām, settlement rates were introduced in the Pondakhol mutta. The field work in connexion with the preparation of a record of rights was completed in the village of Kartalipālem in the Mandāsa estate and Jhadobondho in the Atagāda estate. A preliminary record of rights was published for Talabhadra, Haripuram, Ambogam, Venkata Varadarājapuram, Bhinnāla, Pottarakonda in the Mandāsa estate and Tandipuram in the Surangi estate. A final record of rights was published

Vizagapatam

for Korlam in the Baruva Hunda estate. In Vizagapatam, rough pattas were issued in the remaining eight villages and objections heard in the remaining sixteen villages of the Golgonda taluk. The fair accounts of all the villages in this taluk as well as in Palkonda and Sarvasiddhi were handed over to the Revenue Department. The preparation of village settlement registers for the three Government taluks was practically completed in the year. The issue of rough pattas and the hearing of objections, which commenced in the previous year in connexion with the revision of quit-rent on village service inams in proprietary estates, were completed during the year. Statements showing the revised quit-rent were also prepared and handed over to the Revenue Department. In

Kistna

the Kistna district, proposals for the settlement of the Jakkulavari Khandrika in the Nuzvid taluk were received and submitted for the

Bellary

orders of Government. In Bellary, the revision of adangals and the survey of subdivisions were completed in the taluks of Adōni and Alūr, and were in progress in Siruguppa, Bellary and Hospet. The scheme report for the resettlement of the taluks of Adōni, Alūr, Siruguppa and Bellary in the Bellary district, and Gooty and Tādpatri in the Anantapur district, received from the Special Settlement Officer, was submitted for the orders of Government. The preparation of the miscellaneous accounts and field inspection preliminary to the introduction of new rates were completed in the taluks of Adōni, Alūr and Siruguppa (part), which were due for resettlement in 1920–21; but the introduction of resettlement rates has been postponed owing to the distress prevailing in the tract. The collection of statistics required for the scheme report for the red soil

Anantapur

taluks of the Bellary district was continued. In Anantapur, the revision of adangals and the survey of subdivisions were practically completed in the Gooty taluk and were approaching completion in the Tadpatri taluk.

North Arcot

In the Tiruvannāmalai taluk of the North Arcot district, inspection by officers, preliminary to the introduction of resettlement, was completed in thirty-two villages. Rough pattas were issued and objections heard in the case of 111 villages, while the fair accounts of 248 villages were handed over to the Revenue Department. This brought to a close the resettlement of the taluk with the exception of the six villages commanded by the private anicuts across the Pambanar and Varattar, the resettlement of which has since been carried out on the lines approved by Government. Village settlement registers were prepared for 357 villages. The final record of rights for the village of Marudālam-Muttuvādi

South Arcot

in the Walajapet taluk was published during the year. In South Arcot, the revision of adangals was completed in the remaining 158

villages of the Vriddhāchalam taluk and the remaining villages of the Chidambaram taluk included within the limits of the Chidambaram municipality. The records of all these municipal villages and of 188 villages of Vriddhāchalam were handed over to the Survey Department. The final scrutiny of resurvey records of the remaining 355 villages relating to the taluks of Tirukkōyilūr and Kallakurchi was completed. Rough pattas were issued and objections heard in the case of 213 and 126 villages, respectively. The fair accounts of 30 villages of Tirukkōyilūr were handed over to the Revenue Department. Village settlement registers for 376 villages in the taluks of Tindivanam and Gingee were prepared and those for 467 villages in the taluks of Cuddalore, Villupuram, Tindivanam and Gingee were submitted to the Board of Revenue. In Tanjore, revision of adangals was completed for 241 villages in the taluks of Shīyāli, Pāpanāsam, Kumbakōnam and Pattukkōttai. The records of 346 villages relating to these taluks and Tirutturaippūndi were forwarded to the Survey Department. Final scrutiny of resurvey records was completed and orders passed by Gazetted officers after inspection in respect of 277 villages relating to Nannilam, Negapatam, Arantāngi, Tirutturaippūndi, Shīyāli and Tanjore (north). Under the orders of Government, rough pattas were issued in connexion with the revision of adangals in advance of the introduction of resettlement for 245 villages in the taluks of Nannilam, Negapatam and Arantāngi and objections heard for 237 of these villages. The fair accounts of 217 villages of the taluks of Māyavaram, Mannārgudi, Tanjore (south), Pāpanāsam, Nannilam, Negapatam and Arantāngi were handed over to the Revenue Department. The scheme report for the resettlement of the Tanjore district was received from the Special Settlement Officer and submitted for the orders of Government. The final record of rights for the whole inam village of Kalabhanurajatottam was published and the records were handed over to the Collector. The preliminary record of rights was published for the villages of Semmangudi and Tenanjeri. Tanjore

In Trichinopoly, the revision of adangals continued to be in progress in the Musiri taluk and was completed in 40 villages. The final check of resurvey records of 14 villages of the Lālgudi taluk was completed out of 20 villages for which records were received from the Survey Department. As in Tanjore, rough pattas were issued and objections heard in the case of four villages in connexion with the revision of adangals. The collection of statistics for the preparation of a scheme report for the resettlement of the district was in progress. Trichinopoly

In Madura, the preparation of village settlement registers was completed in the case of some of the taluks and approaching completion in the case of others. One hundred and thirty-four registers were prepared and 160 submitted to the Board of Revenue. The hearing of objections to the entries in the preliminary record of rights was completed for all the seven villages of the Erasakkanāyakkanūr zamindari in the Periyakulam taluk and the preliminary record of rights for the whole inam village of Kīlmāttūr in the Madura taluk was published in the year. Inspection for the purpose of block classification in whole inam villages was completed and the survey records of all the villages were finally checked. Rough pattas were also issued and objections heard for all these villages. Considerable progress was also made in the classification and sketching of Government interested lands in the non-Government villages. The supplemental survey of subdivisions in whole inam and zamindari villages in the area affected by the Periyār continued to be in progress. The measurement of subdivisions, the preparation and issue of rough pattas and the hearing of objections were completed in the case of all the villages. The only pending item of work was the preparation of adangals and this was in progress. Madura

In Rāmnād, the resettlement rates were introduced in the four Government villages of the Paramagudi taluk. The village settlement registers for all these villages and the remaining village of the Aruppukkōttai taluk were submitted to the Board of Revenue. The hearing of objections Rāmnād

The Nilgiris Malabar

to the entries in the preliminary record of rights of Puvandi which was published in the previous year was completed. Progress in the revision of adangals and classification work was continued in the Wynaad taluk. Field work alone was completed in four desams, while both field and record work was finished in 26 desams. The records of 37 desams were handed over to the Survey Department. The Special Settlement Officer's scheme for the resettlement of the village of Masinigudi in the Ootacamund taluk was submitted to Government and the current settlement has since been extended till 1932-33. In the Gūdalūr taluk, the additional field and record work consequent on the classification of wet lands into permanent wet and fugitive wet and on the amendment of section 14 of the Malabar Land Registration Act, was completed in one desam and is expected to be completed soon in the remaining 11 desams. The records of these 11 desams, which were complete in all other respects, were sent to the Survey Deparment.

Registers

54. During the year 656 village settlement registers were received, 481 were scrutinized, 399 were printed and 268 issued to Collectors.

Finance

55. The total expenditure was Rs. 7·96 lakhs as against Rs. 6·77 lakhs in the previous year. A sum of Rs. 1·57 lakhs was spent on the controlling office as against Rs. 1·81 lakhs in 1919-20. The cost of printing and binding settlement registers increased from Rs. 0·18 lakh to Rs. 0·25 lakh and the expenditure on settlement parties from Rs. 4·78 lakhs to Rs. 6·13 lakhs.

LAND RECORDS (1920-21)

[*G.O. No. 2657, Revenue, dated the 3rd December 1921*]

General

56. At the meeting held on the 21st March 1921, the Madras Legislative Council adopted a motion to delete the provision made in the budget for the cost of the Land Records Department and, as a result, the department was abolished with effect from the 1st May 1921. The question of the supervision of maintenance of land records in towns and unions is under separate consideration.

Maintenance

57. Throughout the year under report, Land Records staffs were mainly employed on regular maintenance in all the districts of the Presidency except in parts of South Arcot, Trichinopoly, Gōdāvari, Tanjore, North Arcot and Guntūr. In the latter tracts, resurvey or operations preliminary to maintenance were in progress. With a view to simplify, facilitate and quicken patta transfer work, a list of questions was prescribed to be answered by village officers when reporting on patta transfer applications without the intervention of revenue inspectors. To secure correct registry of unregistered cases of transfers, the Government approved in August 1920 the adoption as an experimental measure in the districts of Tinnevelly and Chittoor of the scheme of maintaining a register of changes of registry in each village similar to the stone registers now maintained by karnams. The quality of the subdivision work steadily improved as a result of the increased scrutiny of the sketches by the Land Records Tahsildar and the number of subdivisions sanctioned in the year for the whole Presidency decreased. The highest number of cases was sanctioned in South Kanara where, owing to the splitting up of large waste blocks, a large number of subdivisions had to be plotted. This number was considerably reduced during the year on account of the employment of a special staff. Next to South Kanara came Tinnevelly, where, in spite of a large number of cases sanctioned, the progress was satisfactory, the number remaining to be plotted being 406 excluding 2,073 cases returned to revenue inspectors for revision. Good work was done in the Chingleput district where the number of cases sanctioned has always been above the average. The work connected with the topographical maintenance of village maps was not satisfactory in many districts. The outturn for the

year in regard to stone maintenance was on the whole satisfactory, though there was a net increase in the arrears at the end of the year for which the districts of Ganjām, Madura and in a less degree, Tanjore, South Arcot and Cuddapah were responsible. Large discoveries accounted for the large number of stones requiring action. There was a very large increase in the repairs by ryots in Coimbatore, but there was no improvement generally under ryots' repairs in other districts. In the districts of Kurnool, Nellore, Coimbatore and Tinnevelly the experiment of appointing karnams as survey officers for maintenance of survey marks was in force. The experiment has since been abandoned, as it was not a success. During the year the Government have approved the proposal of the Board of Revenue that applications from private parties to be shown the boundaries of their land according to the Government survey records should be complied with and that a fee of Re. 1 should be charged for each 'F' line pointed out to them by the revenue inspector. In Madras City, the Special Survey and Land Records operations to render the records fit for maintenance were in progress: but no new towns were brought under maintenance during the year. Maintenance of union surveys were in progress in a few districts. The condition of the Great Trigonometrical Survey stations and bench marks was generally good and necessary action was taken in respect of such as were in need of repair.

58. A school for the training of seven officers (Assistant and Deputy Collectors) in survey and maintenance of land records was held in the Kurnool district for a period of one month. Another school for the training of 17 candidates as Land Records Tahsildars was held at Tirukkalikkunram in the Chingleput district for a period of 16 weeks from the 1st September 1920. The usual schools for the training of revenue subordinates and of karnams including candidates for karnams' posts and civil court process-servers and amins were also held in various districts. In addition to these, karnams and triune officers of proprietary estates were separately trained in five districts. **Training of staff**

WASTE LANDS

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Season and Crop Report for the agricultural year 1920-21*]

59. The total area of the Presidency is 89·762 million acres as against 89·760 million acres in the previous year, of which a net extent of 33·073 million acres was under cultivation as against 33·105 million acres in the preceding fasli. The area classed as forest decreased from 13·155 million acres to 12·986 million acres, while 21·827 million acres (or 0·076 million acres more than in the previous year) were not available for cultivation. Of the remainder 9·878 million acres were fallow and 11·997 million acres formed culturable waste other than fallow as against 9·876 million acres and 11·874 million acres, respectively, in the previous fasli.

GOVERNMENT ESTATES

60. There is nothing to record under this head.

WARDS' ESTATES

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Report on the administration of the estates under the Court of Wards in the Madras Presidency for fasli 1329 (1919–20)*]

Estates under management

61. Twenty-one estates were under the Court's superintendence at the end of fasli 1328. The Kāsimkōta estate in Vizagapatam was taken over on the 11th July 1919, as the proprietor was considered incapable of managing it ; the Metrātti estate in Coimbatore and the Kūdapalli estate in Trichinopoly came under the Court's management, as the proprietors were minors. The estate of Nawab Saiyid Muhammad Sahib Bahadur was hopelessly embarrassed and its funds were inadequate even for the ordinary expenses of its management. The Nawab died on the 12th February 1919 and his estate was handed over to his heirs on the 9th October 1919. The Kāsimkōta estate was restored to its proprietor on the 23rd December 1919. The number of estates under the Court's management at the end of fasli 1329 was therefore twenty-two.

Finance

Demand, collection and balance

62. Of the total current demand of Rs. 42·39 lakhs, Rs. 34·93 lakhs were collected and Rs. 0·14 lakh written off, leaving a balance of Rs. 7·32 lakhs at the close of the fasli. Excluding subsequent collections, remissions and amounts recommended to be written off, the net recoverable balance amounted to Rs. 6·03 lakhs, or 14·2 per cent of the demand, against 14·4 per cent in the previous year. In nine estates, the balance was less than 5 per cent of the demand ; in five, it was between 5 and 10 per cent ; and in four, between 10 and 25 per cent. The balance exceeded 25 per cent in four estates. The total arrear demand at the beginning of the fasli amounted to Rs. 10·98 lakhs, of which Rs. 6·06 lakhs were outstanding at its close. There was no outstanding arrear in one estate. The aggregate cash balance of all the estates (excluding Kāsimkōta and the Nawab's estate), at the beginning of the fasli, was Rs. 8·08 lakhs. The total cash receipts of the estates during the year amounted to Rs. 40·53 lakhs. The total assets of the fasli in cash were therefore Rs. 48·61 lakhs. The total expenditure during the fasli amounted to Rs. 36·41 lakhs, leaving a cash balance of Rs. 12·20 lakhs at its close. Including Government promissory notes and other securities and the estimated value of grain on hand, the total closing balance to the credit of the estates was Rs. 24·12 lakhs. The ordinary cash receipts and charges of the year amounted to Rs. 37·76 lakhs and Rs. 24·44 lakhs against Rs. 27·61 lakhs and Rs. 20·38 lakhs in the preceding year.

Surplus balances

Surplus balances exceeding a lakh of rupees were at the end of the year held on behalf of Kallikōta-Atagāda, Sāptūr, Sivaganga, Ūttumalai and Ūrkkādu. In Kallikōta-Atagāda, the surplus has been earmarked for the completion of the Nirasapalli irrigation project and for the construction of certain roads, which were undertaken and in progress during the year. The Nirasapalli project in Atagāda was taken up and the immediate effect of this work was to obviate the necessity of any fresh expenditure being incurred on famine relief. A large portion of the balance in Sāptūr, Sivaganga, Ūttumalai and Ūrkkādu has been invested in Government securities. The remaining surplus in Ūttumalai is being chiefly reserved for the execution of maramat works in accordance with a five years' programme. The entire surplus in Sivaganga will be required for the survey of the estate, which has been commenced and is in progress.

Establishment charges

The average percentage for all the estates of the establishment charges and Government commission to normal receipts was 15·7 against 17·7 in the preceding year. Taking the estates individually, the percentage exceeded the prescribed maximum of 12 in all the estates except five. Circumstances vary greatly in different estates : and experience has shown that, in most of them, 12 per cent is an impossible limit, particularly in the cases of small estates. In seven estates, the percentage was particularly high, viz., Pedda Mērangi (25·6), Madugula (34·0), Timmāji-ammā's estate (23·9), Bērikai (27·2), Bāgalūr (25·4), Madukkūr (22·9), and Sāptūr (22·1). In Madukkūr, the percentage (22·9), though high, was much

less than that of the previous year (34·0) and the fall was due to an increase in the normal receipts of the year owing to the favourable season. In the other estates, the percentage was higher than in the preceding year, the increase being generally due to the payment of enhanced war allowances.

Works

63. Irrigation works are commonly found to be in a neglected condition when the estates come under the Court's management and the chief benefit which the estates can expect to derive from the Court's management is in the direction of the improvement and repair of the existing works and the construction of new works. Increasing attention is therefore being paid to maramat works. Including the devastanam and chatram sections in estates in which these sections have separate endowments, the total allotment for maramat works in all the estates was Rs. 6·02 lakhs, of which Rs. 4·92 lakhs, or 81·7 per cent, were actually spent during the year, against 86·7 per cent in the previous year. The aggregate value of work done but not paid for within the fasli was Rs. 0·36 lakh. The total value of works executed during the year was therefore Rs. 5·28 lakhs, or 87·7 per cent of the allotment, against 95·5 per cent in the preceding year and 98·2 per cent in fasli 1327. Of the total expenditure, Rs. 2·38 lakhs were spent on irrigation works, Rs. 1·48 lakhs on buildings, Rs. 0·47 lakh on roads and other works and Rs. 0·59 lakh on establishment and contingencies. The aggregate outlay was 16·98 per cent of the ordinary charges of the year (including those of the devastanam and chatram sections) against 15·9 per cent in the previous year and 15 per cent in fasli 1327.

Debts

Debts due to the estates

64. The aggregate amount of debts due to the several estates in the year was Rs. 1·33 lakhs, of which Rs. 0·30 lakh was collected and Rs. 0·03 lakh written off, leaving a balance of Rs. 1·00 lakh appertaining to fourteen estates. The outstanding balance was large in Kallikōta-Atagada (Rs. 0·31 lakh), Rāmapatnam (Rs. 0·22 lakh), Kūdapalli (Rs. 0·13 lakh) and Ūrkkādu (Rs. 0·12 lakh). The bulk (Rs. 20,000) of the balance in Kallikōta-Atagada had not fallen due within the fasli; for about Rs. 7,000 either execution proceedings were pending in Courts or execution applications were about to be filed; and the rest was in course of collection. The major portion of the debts due to Rāmapatnam, the Court expects to realize in the current fasli. Kūdapalli was taken over in the middle of the fasli and steps were being taken for the recovery of the outstanding debts. The balance in Ūrkkādu comprises loans granted to the Berikai and Kadambūr estates and to the endowment section of the Ūrkkādu estate.

Debts due by the estates

Including the debts newly brought to account (Rs. 2·09 lakhs) and the interest and costs which accrued during the year (Rs. 0·59 lakh), the total liabilities amounted to Rs. 15·69 lakhs, of which Rs. 2·98 lakhs were repaid and Rs. 0·53 lakh struck off, leaving a balance of Rs. 12·18 lakhs at the end of the year, which was payable by sixteen estates. They were heaviest in Ārni (Rs. 3·65 lakhs) and exceeded one lakh in Rāmapatnam, Madukkūr, Kadavūr and Kūdapalli. Kadavūr and Ārni were the only estates in which the provisions of section 45 of the Madras Court of Wards Act, 1902, continued in force during the fasli. Debts amounting to Rs. 0·23 lakh were paid off in the Kadavūr estate, leaving a balance of Rs. 1·12 lakhs at the close of the year. In the Ārni estate a debt of Rs. 1·42 lakhs was repaid and Rs. 0·53 lakh was struck off, leaving a balance of Rs. 3·65 lakhs at the close of the year.

Encumbered estates

Education

65. At the beginning of the fasli there were nine minors at Newington. There were no new admissions during the year. Mr. Morrison was in charge of the institution till he went on furlough on the 5th August 1919 and during his regime he rendered invaluable services as tutor and guardian to the Court's wards. The late Mr. de la Hey took Mr. Morrison's place and on the night of the 15th October 1919 was shot dead while sleeping in the verandah of Newington. The Kadambūr ward and the minor son of the Zamindar of Singampatti, who was not a ward of the Court, were arrested by the police; in the course of the trial, the latter

was accepted as an approver and the Kadambūr ward was finally acquitted by the High Court of Bombay. After this terrible murder of a gentleman to whose loyal and able services much of the success of Newington was due, it was decided to close the institution. The remaining seven pupils continued at Newington till the middle of February 1920, when they were sent to their homes. Arrangements were made for their education in their districts under suitable guardians and tutors.

Miscellaneous

66. Separate accounts were maintained for the religious and charitable institutions attached to Kallikōta-Atagada, Madukkūr, Kadavūr, Kūdapalli, Sāptūr, Sivaganga, Ūttumalai, Ūrkkādu, Talaivankōttai and the Zamorin's estate. The administration of these institutions continued to be satisfactory and their financial condition was generally sound. Subject to the Estate Collector's general control, the management of the devastanam-chatram institutions attached to the Sivaganga estate has since been transferred to the Zamindar in order to give him practical training in administration. The second-grade college maintained by the Zamorin's estate was till recently open only to the higher castes. The Zamorin has now thrown open the college to all castes. The results of the School Final and the Intermediate examinations were fairly satisfactory. The strength of the institution increased in all departments. The financial condition of the college improved during the fasli owing to the increase in numbers, but the college received, as usual, a considerable contribution from the main estate. A proposal to raise the college to the first grade is under consideration. The Raja's High School, Sivaganga, suffered a little in strength, but the results of public examinations were fairly satisfactory. The financial condition of the school was satisfactory. The Pedda Mērangi ward died on the 9th May 1920. The succession to the estate is disputed and the Court is retaining the management pending settlement of the dispute by a Court of Law.

REVENUE AND RENT-PAYING CLASSES

(FASLI 1329—1ST JULY 1919 TO 30TH JUNE 1920)

[*Report on the Settlement of Land Revenue for fasli 1329*]

Revenue-paying classes

67. The principal revenue-paying classes of the Presidency are zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The last class predominated largely and contributed about 78·1 per cent of the land revenue. There was an increase of about 3·5 per cent in the total number of ryotwari holdings as compared with that of the previous fasli.

Rent-paying classes

68. Tenants in zamindari and whole inam villages constitute the rent-paying classes. Subletting was chiefly resorted to by those engaged in professions other than agriculture or by large landholders. It was on the increase in the Madakasīra taluk of the Anantapur district owing to most of the lands there being owned by Brahmans, a non-cultivating class, in the tracts under the Tungabhadra channels in Bellary and in the Kumri Hill villages of Kāsaragōd taluk in South Kanara owned by large landholders and on the decrease in the Gōdāvari, Nellore and Cuddapah districts, owing to the rise in the prices of food-grains.

CHAPTER III

PROTECTION

LEGISLATING AUTHORITY

69. *Vide* pages 128 to 131 of the Report on the administration of the Madras Presidency for the year 1911–12.

COURSE OF LEGISLATION (1920–21)

General

70. The year under report marked the close of one epoch and the commencement of another in the history of the Legislative Council. On the 4th October 1920, after nearly 10 years of useful existence, the old Morley-Minto Council came to an end and in January 1921 the new Council under the Montagu-Chelmsford reforms was inaugurated.

Old Legislative Council

71. During the last six months of its existence, the old Council turned out a volume of legislation which was very striking. As many as a dozen Acts were passed, of which some were of great and far-reaching importance. The Children Act and the District Municipalities Act, though referred to in the report of last year, really became law only during the year under report. The Town Planning Act, the Local Boards Act and the Village Panchayat Act completed the programme of local and municipal legislation which the old Council had set before itself during the last two years of its existence. Another important measure for which the Council was responsible was the Elementary Education Act which provided for the creation in each district of a District Educational Council, for the levy of an education tax subject to prescribed maxima to meet the increased outlay on elementary education, and for the introduction of compulsion in suitable areas with the previous sanction of the Local Government. The Mulgeni Rent Enhancement Act provided for the enhancement of rent on certain mulgeni tenures in South Kanara and for the equitable apportionment between a mulger and his tenant of the increased assessment imposed at the resettlement. Five other minor amending Acts were also passed by the Council, viz., (1) The Irrigation Cess Amendment Act, (2) The Salt Amendment Act, (3) The Co-operative Societies Amendment Act, (4) The General Clauses Amendment Act, and (5) The District Municipalities Act. A Bill to amend the Madras Impartible Estates Act was introduced in the Council but was withdrawn on the ground that it was impossible to get it passed in the life-time of the old Council. A motion to introduce a Rent Restriction Bill for Madras City was also put to the Council and lost. In bringing the final session of the old Council to a close, His Excellency Lord Willingdon made an interesting speech in the course of which he stated that during the last 14 months of its existence the Legislative Council had passed more Bills than had been passed in the life-time of any previous Council in Madras and that the volume of work done during the same period with regard to Bills had been more than that done in all the previous 9½ years put together.

New Legislative Council

72. The first elections for the new Council were held during the month of November and the elected members took their oaths on the 17th December 1920. On the 12th of January 1921 His Royal Highness

the Duke of Connaught inaugurated the new Council with impressive dignity in a speech which breathed the genuine sympathy of the Royal Family and of the British people with the growing political aspirations of the people of this country. In the new Council, the seat of one member was declared vacant by his failure to take the prescribed oath, two members resigned consequent on their acceptance of office under the Crown and there was one casualty. Further the election in one non-Muhammadan rural constituency was declared void by the Court of Election Commissioners. All these vacancies have since been duly filled up. During the quarter ending the 31st March, the Deputy President's Salary Act was the only Act that was passed. Two Bills were introduced—one with a view to amend the law relating to survey of lands and settlement of boundary disputes and the other to amend the Madras Cattle Diseases Act. Both the Bills were still under consideration at the close of the year.

Government of India

73. The Madras Government did not send up any Bill to the Government of India for introduction in the Imperial Legislative Council or the Indian Legislature.

POLICE (1920)

[*Report on the administration of the Police of the Madras Presidency for the year 1920; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Police*]

Administrative changes

74. The new Agency division comprising the old Jeypore district and the Agency tracts of Ganjām, Vizagapatam and Gōdāvari was constituted with effect from the 1st December with headquarters at Waltair. Partly owing to this change and partly to secure a better co-ordination of work in districts, the charges of Deputy Inspectors-General were re-distributed, the headquarters of the Central and Southern Ranges being moved to Bellary and Vellore, respectively. The headquarters of the Western Range was temporarily moved to Coonoor for want of accommodation for the Deputy Inspector-General in Coimbatore. Changes in district charges were more numerous than in the previous year, only six districts remaining without a change. As in the previous year, these changes were due to the grant of leave to a large number of officers and the uncertainty of the dates of return of those on leave. Fourteen subdivisions were left without a separate officer in charge, two for a little over six months, two for three months and the rest for shorter periods. At the close of the year Superintendents of eighteen districts had the services of Personal Assistants. Out of the five officers who were on military duty, two were released from that duty during the year. Two officers were deputed on other duty, one under the Government of India and the other under the Pudukkōttai Durbar. Three Deputy Superintendents were appointed to the Imperial Service during the year. One Deputy Superintendent died. In the office of the Deputy Inspector-General, Railways and Criminal Investigation Department, the post of a gazetted assistant was newly created, the posts of the office Manager and a Deputy Superintendent being abolished.

Police force

Strength

75. The sanctioned strength of the permanent force on the last day of the year was 32,986 or 97 more than that of the previous year. The shortage of 1,004 in the sanctioned strength with which the year opened declined to 541 at the end of the year. In most districts recruitment was easy, but the quality of the recruits was inferior. A large number of demobilized sepoys was available, but what chiefly facilitated recruitment was the grant of the additional temporary allowance which raised the pay of the constabulary by 50 per cent. The direct recruitment of head constables was stopped, as was stated in the report of last year.

Health

The year was free from epidemics and the health of the force improved. The number of deaths decreased from 536 to 475, the percentage to the

actual strength being 1·5 against 1·7 in the previous year. The percentage of admissions into hospitals rose from 162·7 to 167·3, but that of the daily sick rate fell from 3·0 to 2·6. The percentage of departmental punishments decreased slightly (31·4 against 32·4) with an appreciable fall however in the number of suspensions from 444 to 359. The proportion of black-marks increased from 22·2 to 23·1 per cent and the system of awarding deferred blackmarks was freely used. There was a fall in the number of officers punished judicially, 179 against 207, and of these 107 were convicted for offences committed in their official capacity, and 72 for offences committed in their private capacity as against 122 and 85, respectively, convicted in the previous year. Convictions under the Police Act numbered 34 against 46 and those for allowing prisoners to escape 32 or one more. The number convicted for extortion remained the same, i.e., 10. Six officers were awarded the King's Police Medal, one was made Companion of the Imperial Service Order, one received the title of Khan Sahib and two that of Rao Sahib. Though the expenditure on rewards was slightly less than in the previous year, the continuance of the policy of a free grant of rewards effected a vast improvement in the co-operation of the public with the police. Out of 3,449 head constables and 26,888 constables, who were in the force on the last day of the year, 31 head constables or 0·9 per cent and 2,660 constables, or 9·9 per cent were classed as illiterate. The Provincial Training School, Vellore, recorded another year's efficient work. Eight probationary Assistant Superintendents and a probationary Deputy Superintendent joined the school during the year. The former practice of sending out during the recess probationary Assistant Superintendents under training to pursue their studies under District Superintendents was reverted to. The educational standard of sub-inspectors was much below the mark. Vacancies among sub-inspectors in districts having become normal and the quality of the men having deteriorated, recruitment for this cadre was restricted and the method of selection is stricter now than before. The work of inspectors also left much to be desired and direct recruitment to that rank which had been stopped for some years was revived. The Shorthand Bureau with 24 sub-inspectors began regular work on the 1st February 1920 and the staff attended and reported speeches delivered at no less than 1,131 public meetings, of which 743 were in Tamil, 237 in Telugu, and 151 in English. As the staff was subjected to heavy strain owing to frequent demands for reporting, a training reserve of four sub-inspectors was added to it in August. The rule requiring from every shorthand sub-inspector high proficiency in two languages was withdrawn owing to the impossibility of maintaining efficiency in both, and every shorthand sub-inspector will in future be required to pass a high proficiency test in one language only at the end of 18 months after joining the Bureau. A knowledge of typewriting has also been made compulsory. The Bureau has fully justified itself and has met a real want. To procure efficient reporters in Urdu, in which language most Khilafat meetings are conducted, two Muhammadan sub-inspectors were deputed to the Christian School of Commerce, Lucknow, to learn Urdu shorthand. The preparation of the Kanarese Shorthand Manual was nearing completion. Instruction in "First-aid to the injured," riding, Swedish drill, and Jiu Jitsu was given as usual, but the results of examinations held in First-aid were poor. The Central Recruits' School, Vizianagram, which was closed in 1918, was re-opened on the 15th January. The other three schools were working throughout the year.

Conduct

Education

76. Co-operation on the part of village officers was reported to be generally improving. During the year the number of village officers who earned rewards fell from 955 to 854 and the amount of rewards disbursed from Rs. 8,843 to Rs. 7,725. The decrease does not, however, point to any lack of appreciation of the village officers' services, but was partly due to restricting the grant of rewards to specially deserving cases and partly to the fewer opportunities of earning them in a year of comparatively less crime. The village officers are now displaying greater zeal and energy in

Village police

helping the police in arresting offenders and in raiding haunts of criminal gangs both on their own initiative and in conjunction with the police. Surveillance of bad characters, reporting movements of strangers and village patrol continue to be neglected and this is due to some extent to inadequate village-visiting by the police and the consequent failure to get into personal touch with the village staff. Superior officers in a number of districts have personally interviewed village officers and explained to them their police duties and have insisted on their subordinates doing likewise and cultivating their acquaintance. In several districts, District Magistrates have also, at the instance of Superintendents, drawn the attention of the village staff to their obligations in regard to their police work. Ghat talaiyaris did useful work in preventing crime and ensuring the safety of roads in all districts where they were employed, and several earned rewards.

Armed reserves

77. The reserves were all up to strength and efficient. Drill and discipline were satisfactory. The emergency force was maintained at full strength in most districts. On the formation of the Agency division the reserves at Russellkonda, Pārvatīpuram and Rajahmundry were transferred to the new division. The reserve at Chōdavaram in the Gōdāvari district was abolished and the men set free were transferred to the Cocanada reserve. The reserve for Madras city, which had been sanctioned temporarily, was made permanent. Instruction in "First-aid to the injured" and signalling continued to be given in reserves. During the year parties of reserves were engaged in rounding up dangerous outlaws, the most successful of these operations being in Kurnool in connexion with the capture of a number of notorious Chenchu outlaws. In these operations the signalling parties were found to be of the greatest possible use.

Railway Police

78. The mileage under the jurisdiction of the Superintendent, Railway Police, Madras, rose from 2,171¼ to 2,187¼, owing to the reopening at the end of the year of the Guntūr-Tenali section of the line which had been dismantled during the war. There was no change in the mileage under the Superintendent, Railway Police, Trichinopoly. The strength of the Madras Railway Police was increased by 1 Sergeant, 1 head constable and 16 constables, and that of the Trichinopoly Railway Police by one Prosecuting sub-inspector. As usual, thefts constituted the bulk of crime and there was a satisfactory fall in them, due to systematic patrols over various parts of the line, special patrols over important station yards where crime was rife, deputation of men in plain clothes in goods trains to watch seals and the arrest and conviction of a number of offenders. Railway menials were responsible for a number of thefts from running trains. To prevent thefts from passenger sheds on the South Indian Railway, men were placed on duty at important stations to spot bad characters. Railway Police were also made to acquaint themselves with local criminals by visits to their villages with the local police, so that they might recognize them when travelling by rail; and the system produced good results. The independent seal-checking of wagons by the Railway Police, Madras, continued to be useful in localising thefts from goods trains. There was a fall in thefts of railway materials on the South Indian Railway. This was partly due to the joint check of fittings by the Railway Police and railway servants, and partly to greater care on the part of the latter in reporting losses. The value of property lost fell slightly, but the proportion recovered decreased appreciably, as most of the property was unidentifiable. Crime was well handled and detection showed no deterioration. Complaints of shortages decreased from 569 to 520. A gang of Iranis, who are a source of increasing nuisance on the railway, caused a disturbance at the Trichinopoly Fort station, robbed passengers in a carriage and assaulted the police. They were quickly removed and charged for rioting. There were six cases of attempts to derail trains and 40 cases of stone-throwing. Collisions numbered ten and derailments five. Labour unrest, which was widespread, became more pronounced among the railway employees on the Madras and Southern Mahratta Railway.

About 300 gangmen who went on strike, because their pay was not increased, were either dismissed or made to lose their appointments and they retaliated by making a series of deliberate attempts to derail trains, the most serious of which was the wrecking of the Bangalore Mail train on the night of the 7th October between Arkonam and Munnal stations caused by the removal of a rail from one side of the line. The engine and tender capsized and the first two third-class bogie carriages telescoped with the result that fourteen passengers were killed and twenty-two seriously injured. In spite of vigorous inquiries and the offer of handsome rewards the culprits could not be traced. As a preventive measure special police parties were detailed to patrol the affected areas and watch the villages in which suspected persons lived and a special staff of 2 Sergeants, 20 head constables and 199 constables was employed for the purpose until the 31st March last. Another equally serious accident occurred on the night of the 13th December at Bommidi station owing to the collision of a mail with a goods train. The latter which had arrived earlier was being taken contrary to traffic rules in the direction from which the mail was expected, when the assistant station-master gave line clear for the mail to pass through. The outer signals had, however, not been lowered. But the mail passed on and collided with the goods train, with the result that four vehicles and a brake-van of the latter were smashed, another brake-van damaged, the engine tender derailed and three wagons behind the goods engine broken up. The engine and tender of the mail train capsized and were partially buried under the three wrecked wagons and three coaches capsized, caught fire and burnt. Thirty-one dead bodies and 9 charred bodies were counted among the debris. Thirty-two injured persons were taken to hospital, of whom 8 died either on the way or subsequently. A joint inquiry and a judicial inquiry were held and the prosecution of the driver of the mail train and the assistant station-master has been sanctioned. The number of persons run over by trains and killed was 301. Owing to labour unrest, the year was an anxious one and entailed much additional work on the Railway Police. The relations between the Railway police and district police on the one hand and the railway staff on the other continued to be harmonious.

Statistics of crime

79. The year was marked by a fairly good rainfall and an improvement in the general conditions, with the result that there was a decrease in crime which in volume approximated to that of 1918. True cases of cognizable crime under the Indian Penal Code, excluding nuisances, numbered 59,109 or 8,764 less than in the previous year. The decrease occurred in all districts except Anantapur and Tinnevelly, where the increase was inappreciable. A good agricultural year provided work for the poorer classes and both house-breakings and thefts, which are the principal forms of crime affected by economic conditions, decreased considerably. Offences under special and local laws numbered 17,240 against 17,814 and nuisances 93,356 against 94,368. The number of serious offences against person and property fell from 26,585 to 22,945, the ratio being one case to every 1,804 persons as against one case to every 1,557 persons in the previous year. The volume of grave crime decreased by 7,872 cases, the decrease being general and occurring under every head. Close supervision over local criminals and efficient preventive work brought about a remarkable fall in burglaries, thefts and cattle-thefts. A marked feature of the year was the concentration of attention in various parts of the Presidency, particularly in the districts of the Central Range, on dangerous wandering gangs which was accompanied by a gratifying fall in violent crime. Murders fell from 982 to 974. In spite of a decrease of 25 cases, Coimbatore again registered the largest number. As usual, a large proportion of murders arose out of sexual relations. Political agitation, which was carried on vigorously in certain parts of the Presidency, threw much extra work on the police in the preservation of order. In places disturbances between Hindus and Muhammadans in connexion with the celebration of religious festivals were threatened, but in all cases timely action was taken and trouble

averted. Discontent among labourers employed in the mills and factories became acute giving rise to a number of strikes and lock-outs. The situation caused much anxiety but was well handled. In Madras City manifestations of labour unrest were frequent and of long duration and culminated in a riot on the 9th December, when the police who were escorting some mill labourers in motor lorries were stoned by large crowds. As the lives of the policemen were in danger, it was found necessary to fire on the mob on two occasions. Each time three rounds of buckshot were fired. Sixteen persons, mostly mill-hands, were injured, two of whom died subsequently. The most serious case of riot of the year occurred at Perungamanallur in Madura district on the 3rd April 1920. The Kallars of the village who had been proclaimed under the Criminal Tribes Act refused to appear for registration before the Special Magistrate appointed for the purpose, in spite of persuasions and warnings. Warrants were therefore issued against them and, with a view to facilitate arrest and overawe the Kallars, a party of fifty men of the reserve police with a Sergeant was sent to the village. The Kallars collected in large numbers, assumed a threatening attitude and surrounded the police on three sides. As the authorities stood in imminent danger of being attacked by the mob which had been reinforced by a number of Kallars from other villages, fire had to be opened with the result that eleven were killed on the spot and eight injured (of whom three died subsequently) and the mob dispersed. The riot was entirely unexpected, and the action of the police effected a revolution in the attitude of the Kallars who have since become amenable to reform. The number of dacoities was 699 or 266 less and of robberies 956 or 188 less than in the previous year. The arrest and conviction of a number of organizers of crime in the previous year partly accounted for the fall. During the year a vigorous campaign was carried on to tackle gang crime. Armed police parties were detailed to trace offenders and their raids resulted in the capture of a number of leaders of notorious gangs. Chenchu crime has practically stopped in Kurnool. House-breakings decreased from 15,783 to 12,669, thefts from 26,297 to 23,019, cattle-thefts from 5,583 to 4,565 and cattle-poisoning cases from 43 to 29. The number of true cases of coining dealt with in the year was 38 or one less than in the previous year and 25 of these ended in conviction. There were 43 cases of justifiable homicide. Twenty-five of these including ten in the Perungamanallur riot and two in the Perambur disturbance were caused by the police in the execution of their duty and in resisting criminals who attacked them to evade arrest, and the rest by private individuals in self-defence and preventing crime. During the year there were frequent collisions between the police and villagers on the one hand and armed criminal gangs on the other.

Detection and prevention of crime

80. Although crime fell to the level of 1918, the percentage of detection (33·9) was higher than in that year (31·1) but lower than in 1919 (35·0). The retrogression was mainly due to a marked failure in murder cases—a class of crime which is neither preventable nor easy of detection. There was a satisfactory decline in the number of cases referred to the police by magistrates under section 202 of the Criminal Procedure Code. The percentage of cases in which investigation was refused was 9·7 as against 9·8 in the previous year. *Pari passu* with a fall in crime there was a decrease in the amount of property lost, but the percentage of recovery was higher than in 1919 and approximated that in 1918. The prosecuting staff was strengthened in the latter part of the year in 16 districts. There was a fall in the number of cases struck off as wilfully and maliciously false, 4,362 against 4,563. The number of known depredators newly registered increased slightly, while there was a decrease both in the number of receivers and suspects registered. The number removed from the register on the ground of being no longer addicted to crime was 3,768 against 3,212. The total number of bad characters at large on the last day of the year was 25,364 against 25,027 and of these 2,357 or 9·3 per cent were out of view as against 8·5 in the previous year. In several districts the number on the registers underwent scrutiny with the result that the number of persons to be watched was brought

Preventive work and criminal gangs

down to manageable limits. Temporary outposts again proved their utility in controlling bad characters and criminals registered under the Criminal Tribes Act. A number of them were opened in the year at important places on gang routes and localities infested with criminals and this resulted in a fall in crime in the neighbourhood. The system of interchange of constables between Rāmnād and Pudukkōttai introduced last year worked satisfactorily. The supervision over criminal settlements was transferred from the Deputy Inspector-General of Police, Railways and Criminal Investigation Department, to the Labour Commissioner, Madras, in February. The settlement at Bhumannagadda was ordered to be closed, as it was a failure as a combined agricultural and industrial settlement. The worst characters were removed to Sitanagram. The other settlements worked satisfactorily. The behaviour of the inmates improved. During the year four criminal tribes were proclaimed under section 3 of the Criminal Tribes Act and both parts of section 10 were extended to them. In addition, section 10 (*a*) was extended to the Donga Woddars in the Anantapur district. The number of persons registered under the Criminal Tribes Act during the year was 22,536, of whom 21,183 were the Kallars of Madura. A considerable number were removed from the registers either on account of good conduct or because no suspicion was attached to them. The number of persons convicted under the Act decreased from 3,076 to 2,713, of whom 12 were convicted under section 23, and 89 under section 24. The total strength at the close of the year in schools in the various criminal settlements was 1,063 (614 boys and 449 girls). Supervision over registered members was efficient. The most satisfactory items of the year's work in connexion with criminal tribes have undoubtedly been the effectual tackling of the Chenchu and Kallar problems which are now in a fair way towards settlement. The Kallar tract is now practically immune from crime.

Criminal Investigation Department

81. A special temporary gazetted assistant with a temporary staff of one inspector, three sub-inspectors and three head constables was sanctioned for a period of one year to work under the Deputy Inspector-General attached to the Director of Intelligence Bureau to deal with Bolshevism. The party kept in touch with the movements of a large number of suspects and with labour and political movements throughout the Presidency. It was strengthened during the visit of His Royal Highness the Duke of Connaught to this Presidency and worked in collaboration with Criminal Investigation Department parties from the rest of India. A number of cases were investigated by the officers of the department, but none of them was sensational. The services of the officers of the department were also utilized in cases of postal thefts and frauds. An important note forgery case and a theft of cash chest from the Madras and Southern Mahratta Railway were investigated. References regarding the antecedents of suspected persons were made to the Finger-print Bureau in 16,872 cases or 1,112 less than in the previous year, and of these 3,719 were identified, the percentage being 22·0 against 23·0. The largest number of references again came from Madras City, Nellore, Kistna, Guntūr and Tanjore within the Presidency and Burma, Mysore and Federated Malay States outside. The number of finger-impression slips received for record during the year was 19,301. Eliminations numbered 6,223 and the number of slips on record at the end of the year was 217,113. Expert evidence was given by the staff on 529 occasions in civil and criminal courts, and written opinions in 127 cases. There has been an increase in the demand for attendance at courts and written opinions, a fact which testifies to the growing popularity of finger-print evidence.

Finger-print Bureau

Finance

82. The total cost of the department for the year 1920–21, excluding the final account for March 1921, was Rs. 152·67 lakhs or an increase of Rs. 32·95 lakhs over the figure for the previous year. The increase was due to the grant of temporary additions to pay to all non-gazetted officers from the 1st April 1920, and to the increased expenditure under "Travelling Allowance" including the cost of railway warrants and other contingencies.

CRIMINAL JUSTICE (1920)

[*Statistics of Criminal Courts in the Madras Presidency for the year 1920; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Criminal Justice*]

General

83. On the 31st December 1920, there were 912 criminal courts including the High Court, as against 907 on the corresponding date of the previous year. In addition, the Subordinate Judges of Coimbatore, Gōdāvari, Kurnool, Salem, Tanjore and Tinnevelly exercised the powers of an Assistant Sessions Judge. From the 1st December the Courts of the Agency Sessions Judges, Ganjām, Vizagapatam and Gōdāvari, ceased to exist, their places being taken by the Court of the Agency Sessions Division. The four Benches of Magistrates established for the town of Madras worked throughout, and on the last day of the year 94 Honorary Magistrates had seats on them. The Bench Courts in Madras and those at Tadpatri and Hindupur in the Anantapur district rendered a substantial measure of assistance to the stipendiary magistrates; other District Magistrates had not reported on the success of such experiments. New Bench Courts were established in ten districts, but in one district the new courts did not commence work during the year. The number of village magistrates who exercised criminal jurisdiction was 3,151 against 3,852 in 1919 and against 4,052 the average for the preceding five years. The total number of original cases instituted in all the criminal courts during the year was 318,476 or 14,377 less than in the previous year. There was a general decrease in all districts. The total number of appeals preferred fell from 9,269 to 8,723, the average for the preceding five years being 9,704.

Original cases

Village courts

Regular Magistrates' courts

84. In village magistrates' courts the total number of cases instituted fell from 10,453 to 8,692 and the number of persons tried from 17,024 to 14,413. Of these 15·48 per cent were convicted against 17·96 per cent in 1919. The number of cases instituted in regular magistrates' courts in the mufassal was 279,071 against 294,656 in 1919, of which 6,645 or 882 more than in 1919 were pending at the end of the year. The average duration from the beginning to the end of trial of cases disposed of by these courts was 7·3 days against 8·6 in the previous year. Before Bench Courts the average duration was two days, before Special Magistrates two, before Sub-Magistrates 11, before Assistant Magistrates 13, before Joint Magistrates 22, and before Deputy Magistrates 32. There

Presidency Magistrates' courts

was an increase (2,978) in the total number of cases instituted in the Presidency Magistrates' Courts. Though the number of cases committed

Sessions courts

to Sessions Courts in the mufassal fell from 1,943 to 1,753, there was a remarkable increase in the number of cases in Agency division, Tinnevelly and South Kanara. The total number of cases pending in all the courts at the end of the year was 171 against 202 at the end of 1919, to which Tinnevelly and Coimbatore contributed the largest number, 26 and 17, respectively. The average duration of cases before Sessions Courts rose from 51 to 56 days. The average was highest in Rāmnād (105 days), North Arcot (100 days) and Salem (81 days). The high average duration in Rāmnād was due to the protracted trial of some cases, the chief of them being the three batches of Kamudhi looting cases and to the adjournment of some cases owing to the absence of material witnesses. The delay in North Arcot was on account of the transfer of cases from Chittoor. The

High Court

number of cases committed to the High Court Sessions was 40 against 54 in the previous year. Two cases were pending at the end of the year.

Appeals

Magistrates' courts

85. Of the persons sentenced by second and third-class magistrates, 13,077 or six less than in the previous year appealed to first-class magistrates. The appeals of 1,164 persons were, however, pending at the end of the year against 725 at the end of 1919. The average duration of an appeal in the courts of subdivisional magistrates rose from 17 days to 19 days, but the percentage of successful appellants remained almost the

Sessions courts

same as in the previous year. The number of persons who appealed to Sessions Courts against the decisions of first-class magistrates fell from 2,688 to 2,226. The number of persons whose appeals were pending at the

end of the year was 247 against 207 at the end of 1919. The average duration of an appeal in the Sessions Court rose from 31 to 35 days and the percentage of successful appellants remained almost the same as in 1919. The number of appellants to the High Court again rose, by 106, to 1,633. The Government appealed against the acquittal of 43 persons, the average for the preceding five years being 46. The appeals of 692 persons were rejected *in limine*, 102 convictions were reversed and orders of acquittal in respect of eight persons were set aside on appeal by Government. In the case of 442 persons the finding and sentence were maintained after notice and in 144 cases the sentences were reduced or otherwise altered. New trial or further inquiry was ordered in the case of 13 persons. The appeals of 275 persons were pending at the end of the year against 328 in 1919. The average duration of an appeal rose, by one day, to 49 days and the percentage of entirely successful appellants fell from 10 to 7·36.

High Court

86. The number of applications for revision presented in District Magistrates' Courts was 759 against 779 in 1919. The number of cases taken up by District Magistrates *suo motu* or on reports from their subdivisional magistrates remained the same as in the previous year, viz., 11. In Sessions Courts 512 applications for revision were presented, or 49 less than in the previous year; and the number of cases taken up by them *suo motu* was 32 against 41 in 1919. The number of revision petitions received in the High Court was 807, a decrease of 83 on the figure for 1919. Seventy-five cases were reported by District Magistrates and Sessions Judges and 56 were taken up by the High Court *suo motu*. Death sentences on 108 persons were referred to the High Court for confirmation under section 374 of the Criminal Procedure Code. The sentences on 51 persons were confirmed, those on 25 persons were commuted to transportation for life, those on three to rigorous imprisonment, and the sentences on 29 persons were reversed and acquittal ordered. Of the cases referred by Sessions Judges under section 307, Criminal Procedure Code, on the ground that the verdicts were wrong, the verdicts on seven persons were upheld, the verdicts on four were modified and those on the remainder (10 of "guilty" and 33 of "not guilty") were reversed.

Reference and revision

87. The number of persons tried by jury was 2,038 and in the case of 1,944 persons the Judges accepted their verdict. The number of persons tried with the aid of assessors was 2,543. In the case of 1,667 persons the Judge agreed with all the assessors, in the case of 321 he differed from one or more of them, and in the case of 555 he differed from all the assessors. The jury system on the whole was reported to have worked satisfactorily.

Jury system

88. Of the 119,233 cases for disposal under the Indian Penal Code, 16,545 or 13·88 per cent were rejected under section 203, Criminal Procedure Code, against 15·11 per cent in the preceding year. The percentage of convictions in cases tried under the Indian Penal Code rose from 40·08 to 43·50. Sufficient use was not made of sections 203 and 250 of the Criminal Procedure Code. The number of cases reported under the Indian Penal Code during the year fell from 121,779 to 111,677 and the decrease was due to a better season and a slight lowering of prices. The total number of sentences passed during the year was 223,801, of which 52 were of death, 246 of transportation, seven of penal servitude, 23,693 of rigorous imprisonment, 4,406 of simple imprisonment, 92 of forfeiture of property, 194,220 of fine and 1,085 of whipping. The amount of fines imposed was Rs. 11·39 lakhs, of which a sum of Rs. 0·55 lakh was paid to complainants under section 545, Criminal Procedure Code. Of the total sentences of imprisonment passed, 5,414 (19 per cent) against 5,034 in 1919 and 3,345 in 1918 were for periods of 15 days and under. This steady increase in the number of short-term sentences is unsatisfactory. The number of persons confined in stocks, a punishment now abolished by the Madras Village Courts Act Amendment Act, was 98 against 222 in the previous year. There was a satisfactory fall in the number of juvenile offenders convicted during the year.

Miscellaneous

Punishments

PRISONS (1920)

[*Report on the administration of the Jails of the Madras Presidency, 1920; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

Accommodation

89. The number of central jails remained the same as in previous year, viz., 9. The Borstal Institution, Tanjore, was classed as a special jail; consequently the number of district jails decreased from 5 to 4. The number of subsidiary jails remained the same, viz., 320, throughout the year. At the close of the year, accommodation was available in central and district jails and in the Civil Jail, Madras, for 12,394 prisoners as compared with 12,350 at the end of 1919, the increase being chiefly due to the provision of additional accommodation for 36 prisoners in the Tanjore Borstal Institution. There was some overcrowding in individual jails, but surplus prisoners were satisfactorily housed in temporary sheds, tents, etc., or transferred to jails which had accommodation to spare.

Prisoners of all classes

90. The year opened with a population of 16,351 prisoners of all classes; 114,932 prisoners were received and 115,824 were discharged, leaving 15,459 in confinement at the close of the year. The daily average number confined fell from 16,098·04 to 15,427·99. The fall in the prison population is chiefly accounted for by the improved economic conditions of the year.

Under-trial prisoners

The number of under-trial prisoners dealt with including those in confinement (3,704) at the beginning of the year was 59,066. The daily average was 3,379·45 or 988·79 less than in the previous year. Of the number confined, 41·55 per cent were convicted and 58·23 were acquitted and released, 22 escaped and 48 died. Prisoners awaiting trial before Sessions Courts were detained on an average for 38·82 days as compared with 44·11 in 1919, while those pending trial before Magistrates were detained for 17·94 days against 17·60 in 1919.

Civil prisoners

The year opened with 385 civil prisoners in custody; 2,983 were admitted and 2,965 were discharged, leaving 403 at the close of the year. The daily average was 309·50 as compared with 300·65 in the previous year.

State prisoners

Four State prisoners remained in confinement at the beginning of the year and one was admitted during the year. Of these, two were released, two were repatriated and one Mappilla State prisoner was convicted and sentenced to transportation for life for deliberately attempting to murder the Deputy Jailer of the Coimbatore Central Jail. No State prisoner thus remained in the jail at the close of the year.

Convicts

91. The convict population on the 1st January 1920 stood at 11,948 males and 314 females or 1,461 more than in the previous year. The number received by direct committal was 26,409 males and 1,245 females as compared with 30,410 males and 1,550 females in 1919. The total number of convicts received by transfer was 28,933 as against 35,186 in the previous year. Of those discharged during the year, 2,894 were released on appeal, 22,222 on expiry of sentence, 3,290 under the remission rules and 56 by order of Government. One hundred and forty-three convicts were deported to the Andamans, 18 were transferred to the Lunatic Asylum, Madras, 7 escaped and remained at large at the end of the year, 49 were executed and 256 died. The daily average convict population was 11,739·04 or 309·89 more than in 1919. The number remaining at the end of the year was 11,913 or 349 less than in the previous year. As usual, the great bulk of the admissions were Hindus who formed 88·76 per cent, Muhammadans (7·85 per cent) and Christians (3·39 per cent) contributing to the remainder.

Juveniles

The number of convicts admitted under sixteen years of age increased from 116 to 138, while the number of youthful offenders under the age of fifteen declined from 52 (48 boys and 4 girls) to 24 (20 boys and 4 girls). Of the 20 boys admitted, five were transferred to the Reformatory School, Chingleput, one was released by order of Government and the remainder underwent their sentences in jails. Of the girls, one was released by order of Government, and three completed their

sentences in jails. There were at the beginning of the year 340 inmates in the Tanjore Borstal institution, of whom one was under fifteen years of age, 291 between fifteen and twenty-one years and 48 aged twenty-one years and over. Only 15 were received by direct committal, 385 were transferred from other jails and 408 were discharged, leaving 332 inmates at the end of the year. None of the inmates were conditionally released during the year owing to the difficulty experienced in finding trustworthy and suitable probation officers willing to take charge of them and find them employment. A blacksmithy class was newly opened during the year.

92. The conduct of the prisoners was on the whole good. There was an appreciable reduction in the number of escapes, offences and punishments. Nineteen prisoners escaped during the year as against 24 in the previous year. Thirteen out of the 19 escapes were recaptured during the year as also 7 who escaped in previous years. The number of jail offences dealt with by Superintendents fell from 7,606 to 6,966 and 11 offences were dealt with by criminal courts. The total number of punishments and the ratio per cent of punishments to the average strength also declined from 7,732 and 67·65 to 7,015 and 59·76, respectively. There was a decline in all forms of punishments. Corporal punishment was inflicted on three prisoners as against four in the preceding year. This form of punishment is reserved only for cases of assault, mutiny and such other serious offences indicating depravity or defiance of authority. The total number of habituals dealt with was 7,571 forming 24·31 per cent of the convict population. They received no less than 2,864 or 40·83 per cent of the total number of punishments. Two of the three whippings were awarded to them. The jails at Salem and Vizagapatam have been set apart for the segregation of the worst offenders of this class and this has tended to reduce prison offences. The number of convicts under the remission rules rose from 2,671 to 3,290. Special remission for continuous good conduct for one year was awarded to 2,264 convicts as against 1,762 in 1919. Extra remission for work turned out over and above the prescribed task was earned by 617 convicts, and gratuity in lieu of remission by 6. Elementary education was compulsorily imparted in all jails to prisoners under thirty years of age by the paid teaching staff. As usual, lectures on moral and religious subjects were delivered from time to time by honorary lecturers appointed for the purpose and on sanitary matters by medical subordinates attached to jails. The jail schools were regularly visited by officers of the Educational Department and their reports were encouraging. Officers serving under the Director of Industries continued to visit industrial jails and give their advice on technical training. Much spade work was done in connexion with a proposal to inaugurate a Discharged Prisoners' Aid Society in Madras. Endeavours were made to enlist the sympathy of leading members of the community and several have come forward with promises of assistance.

Conduct

Habituals

Remission

Education

93. There was a substantial decrease in sickness and mortality due to special attention paid to sanitation and medical treatment. The admissions to hospital fell from 9,567 to 7,046. There were only 308 deaths during the year as compared with 550 in the preceding year. The death-rate per mille fell from 34·17 to 19·96 which is the most satisfactory on record since the year 1917, in spite of the prevalence of epidemic diseases such as cholera, plague, influenza and dysentery during the year. Owing to the persistent unfavourable reports on the analysis of jail water-supplies, instructions were issued for wells in all jails to be periodically cleaned and hankinised. As a preventive measure, water for drinking purposes is either boiled or chlorinated. At Vellore, a new pumping installation was erected, a garden-well deepened and the well in the quarantine covered with planks. At Coimbatore, Cannanore, Bellary, Palamcottah and Berhampur, improvements to wells were carried out. The experiment of fly-proofing jail kitchens having proved successful in preventing the spread of fly-borne diseases, this form of kitchen has been standardized for central and district jails and certain selected subsidiary jails. At Rajahmundry, a fly-proof model kitchen was built in the

Vital statistics

Sanitation

hospital. Improvements were also carried out to the kitchens at Vellore, Salem and Palamcottah. Several of the latrines in most of the jails were made fly-proof. Septic tanks were built at Rajahmundry and Salem. Special up-to-date incinerators were constructed at Cannanore, Salem, Bellary, Vizagapatam, Cuddalore and Madura, and special sanitary latrines were provided for the infectious diseases hospitals in certain jails. At Rajahmundry, a mosquito-proof ward and a dispensary for the infectious diseases sheds were constructed. Dispensaries in the quarantine of the Vellore and Coimbatore Jails, an operation theatre at Trichinopoly and a new bathing and disinfecting platform at Cannanore were built: and several other improvements to hospital and other buildings were also effected during the year.

Finance

94. The total expenditure excluding the outlay on jail buildings by the Public Works Department amounted to Rs. 27 lakhs or Rs. 2 lakhs over that of the previous year and was due to increased expenditure under all heads except transfer charges and charges for police custody. The increase in the convict population, the high rate at which foodstuffs and other materials were purchased, and the increased temporary allowances sanctioned during the year were mainly responsible for the great increase in expenditure. The cash earnings amounted to Rs. 0·77 lakh as compared with Rs. 2·04 lakhs in 1919. This decline was chiefly due to lack of orders from the Military and other public consuming departments. With a view to securing suitable labour for prisoners and finding a regular market for jail-made goods, an informal conference on jail industries was held towards the close of the year; it was generally agreed to that consuming departments of Government should obtain their requirements from jails and that the Jail Department should proceed to develop its industries so as to meet those requirements. The net cost of maintaining prisoners and the average net cost per head increased from Rs. 15·72 lakhs and Rs. 99-8-0 to Rs. 18·59 lakhs and Rs. 122-3-0, respectively. The total expenditure on jail and sub-jail buildings amounted to Rs. 2·25 lakhs as against Rs. 1·69 lakhs in the preceding year.

Miscellaneous

95. Two hundred and fifty-six visits were paid during the year by official and non-official visitors as against 209 in the previous year. His Excellency the Governor of Madras visited the District Jails at Palamcottah and Madura. The Indian Jails Committee paid visits to Vellore, Coimbatore, the Penitentiary, Madras, the Borstal Institution, Tanjore, and the District Jail, Madura, for purposes of inquiry. The Director-General of the Indian Medical Service visited the Borstal Institution, Tanjore. The administration of the department continued to be efficient.

CIVIL JUSTICE (1920)

[*Statistics of Civil Courts in the Madras Presidency for the year 1920: Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Civil Justice*]

General

96. The total number of permanent District Munsifs' Courts rose, by 1, to 171 : whereas that of Subordinate Judges' Courts fell, by 4, to 37. There was no change in the number of permanent courts of other classes. Two temporary District Courts were also established in the year—one at Anantapur and the other at Vellore. There were in addition 20 temporary Subordinate Judges' Courts and 22 temporary District Munsifs' Courts.

Litigation

Number, nature and value of suits

97. The total number of suits instituted in the Presidency during 1920 was 496,433 or 14,596 less than in 1919. For the Presidency as a whole, one suit was instituted for every 83 persons of the population against 1 for every 81 persons in 1919 and the ratio for the Presidency town was the same as last year, viz., one for every 33 persons. In the

mufassal, North Malabar was as usual the most litigious district, the institutions representing one suit for every 29 persons and, apart from the Agency tracts, Anantapur was the least litigious, not more than one suit being filed for every 222 persons. The largest number of suits instituted in a single district was 46,897 (in Tanjore), but the total for North and South Malabar, which form one Revenue district, exceeded this figure by 17,997. Anantapur contributed the smallest number of suits (4,340). The number of suits instituted for money or movable property was 411,900 or 87·8 per cent of the total as against 87·7 per cent in 1919, when the number of suits of this class was 430,869. The number of suits for immovable property other than mortgage suits was 25,380 against 26,014 in 1919, and the number instituted in Revenue Courts was 27,112 against 19,744. The total value of suits instituted in courts other than Village and Revenue Courts and unpaid tribunals was Rs. 1,205·27 lakhs or Rs. 134·73 lakhs more than in the previous year. The average value of a suit was Rs. 322 against Rs. 271 in 1919. Apart from Revenue Courts, 28·32 per cent of the suits instituted were of the value of Rs. 20 and less against 30·51 per cent in the previous year and 65·13 per cent were for those between Rs. 20 and Rs. 500. The number of suits above Rs. 500 in value was 29,917 against 28,729 in 1919. The number of suits triable by Village Courts which were filed before the higher tribunals was 124,731, or an increase of 76,386 over the figure in the previous year. This increase is attributable to the raising of the pecuniary jurisdiction of Village Courts from Rs. 20 to Rs. 50 by the new Village Courts Amendment Act. As compared with the last year, there was no variation in the percentage of cases in which plaintiffs were successful either wholly or in part; in 70·61 per cent of contested cases they were found to possess a well-grounded cause of action. The total number of appeals preferred was 16,577 or 143 less than in the previous year.

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Courts of Original Jurisdiction

98. The total number of suits instituted in Village Courts again fell from 96,124 to 95,214. The number of suits disposed of by village munsifs sitting alone rose from 74,707 to 88,104, but the number disposed of by Benches fell from 21,365 to 6,894. On the coming into force of the Madras Village Courts (Amendment) Act, 1919, Bench Courts automatically ceased to exist, and this accounted for the increase in disposals by village munsifs and the fall in disposals by Bench Courts. The new Panchayat Courts did not in most places come into working during the year. The total number of suits filed in Revenue Courts, other than in Agency tracts, rose from 19,574 to 26,730. The total number of suits disposed of was 22,028 against 22,403 in the previous year and the arrears rose from 8,167 to 13,404 The average duration of contested suits rose from 264 days to 309 days and that for uncontested suits from 88 to 92 days. The disposal of contested suits was most prompt in Guntūr (26 days), South Arcot (56 days) and Madura (76 days). The percentage of appeals preferred against the decisions of Revenue Courts to the appealable decrees passed by them rose from 20·53 to 21·35. The percentage of appeals in which original decrees were confirmed was 50·82 against 40·14 in 1919. Institutions in Agency Courts came to 2,137 or 297 more than in 1919. The number of suits disposed of was 2,043, and 517 were left pending at the end of the year against 452 in the previous year. The average duration of contested suits fell from 172 days to 115 days and that of uncontested suits from 83 days to 64 days. In District Munsifs' Courts, other than those for the Agency tracts, 119,550 ordinary suits were instituted or 3,614 less than in the previous year. There was also a decrease of 18,718 in the number of small cause suits instituted, the figure being 195,415 against 214,133 in 1919. There was thus a decrease of 22,332 in the total of both classes of suits. The average total disposal of each court during the year was 1,882 against 2,070 in 1919 and the arrears under both classes of suits fell from 84,814 to 84,014. The average duration of contested ordinary suits was 328 days against 315 days in 1919, while that of uncontested ordinary suits was practically the same as last year. The percentage of appeals to appealable decrees passed by District

Village Courts

Revenue Courts

Agency Courts

District Munsifs' Courts

Munsifs was 10·63 against 11·09 in the previous year. The percentage of appeals in which original decrees were confirmed was 58·24 of the number decided against 58·95 in 1919.

Subordinate Judges' Courts

In Subordinate Judges' Courts, other than those for Agency tracts, 2,940 ordinary suits and 24,652 small cause suits were instituted, the figures for the previous year being 2,754 and 22,864, respectively. The average disposal of ordinary suits in all the Subordinate Judges' Courts was a little higher than in 1919. The average duration of ordinary suits in Subordinate Judges' Courts was 503 days against 490 in 1919 in the case of contested suits, and 89 days against 96 in the case of uncontested suits. The average for contested small cause suits was 132 days against 143 days in 1919 and for uncontested suits 51 days against 56 days.

District courts

In District Courts, other than those for the Agency tracts, 585 ordinary suits were instituted against 572 in 1919. The number of ordinary suits disposed of was 226 against 270 in 1919 and the arrears rose from 523 to 550. The average number of days which the District Judge was able to devote to civil work was 86 days against 94 in 1919. The average duration of ordinary suits in District Courts was 361 days against 425 in 1919, in the case of contested suits, and 141 days against 137 in 1919, in the case of unconfested suits. The average duration of contested suits exceeded 500 days only in one court (Trichinopoly 990 days in a single suit) against eleven in the previous year. Tanjore disposed of one uncontested suit, ex parte, the duration being 980 days.

Courts of Small Causes

In the Special Small Cause Courts, the number of suits filed was 13,602 or 455 less than in the previous year. 13,415 suits were disposed of against 14,358 in the previous year and the pendency rose from 1,848 to 2,156. In the Presidency Court of Small Causes, the number of suits instituted was 14,085 against 14,621 in 1919. There was a decrease in the number of suits disposed of from 15,062 to 14,154 and arrears also fell from 1,498 to 1,437.

Madras City Civil Court

In the Madras City Civil Court, 543 suits were instituted against 448 in 1919. The Judge disposed of 608 suits, of which 431 were contested. The arrears fell from 356 to 310 suits. The average duration rose from 311 days to 392 days for contested suits and from 57 to 62 days for uncontested suits.

High Court

In the High Court, the number of suits instituted or received by transfer was 1,006 against 915 in 1919 and the number disposed of was 811 against 680. The arrears rose from 838 to 1,054, although three Judges sat on the Original Side of the Court for 32 days between August and October. The increase in institutions is attributable to the disturbed state of trade and finance and the speculative nature of commercial transactions during the previous three years. The average duration of contested suits was 415 days and of uncontested suits 159 days against 350 and 140, respectively, in 1919.

Appellate courts

99. The number of regular appeals filed in the Agency tracts fell from 95 to 74. The number of appeals disposed of was 68, and 32 were left pending at the end of the year. The percentage of confirmation was 46·97 against 51·46 in 1919.

Agency courts

District and Subordinate Judges' courts

In District and Subordinate Judges' Courts the number of appeals filed was 13,307 against 13,598 in 1919. The number of appeals disposed of by Subordinate Judges was 6,482 against 6,118 in the previous year, and the arrears rose from 3,112 to 3,372. The number of appeals pending for more than six months rose from 1,272 to 1,555 at the end of the year. 4,829 appeals were disposed of by District Judges against 4,707 in 1919 and there was an increase in the arrears from 8,006 to 8,551. The number of appeals pending for more than six months rose from 2,338 to 2,814 at the end of 1920. The average duration of appeals disposed of by District Judges was 294 days for uncontested and 395 days for contested appeals, the corresponding figures for the previous year being 187 and 306 days, respectively. Pressure of criminal work, sessions and appellate, accounted for the increase in duration and the pendency of appeals in District Courts.

High Court

The number of appeals from original decrees of the mufassal courts filed in the High Court fell, by 29, to 363. The number disposed of was 395 against 419 in the previous year and the arrears decreased from 582 to 550. The number of Letters Patent appeals (other than Original Side appeals) filed was 22 against 86 in 1919.

The number disposed of was 36 against 120 in the previous year and the arrears fell from 28 to 14. The average duration of the second appeals disposed of was 881 days against 449 days in 1919. This very heavy duration was largely due to the disposal of 86 second appeals of 1902 and 88 second appeals of 1903, remanded by the Privy Council in 1917 and which were disposed of in six batches. The percentage of appeals dismissed was—First appeals from District Courts 57·50, from the City Civil Court 84·38 and from Subordinate Judges' Courts 59·95 ; Original Side appeals 67·92, appeals against appellate decisions 78·10 and Letters Patent appeals 72·22. The number of revision petitions filed in the High Court fell from 1,139 to 919, of which 436 or 98 less than in the previous year were for the revision of decisions in small cause suits. The number of petitions disposed of increased from 937 to 1,505 and the arrears fell from 1,435 to 849, of which 556 were pending for more than six months. The number of cases referred by the lower courts to the High Court was 19, and including the pendency of the previous year, there were 26 cases in all of which 12 were disposed of. Reference and revision

100. The number of insolvency petitions presented to the mufassal courts showed an increase, the number being 2,804 against 2,784 in the last year. The pendency at the end of the year rose from 1,112 to 1,293. The number of petitions granted was 1,591 against 1,707 in 1919. The total amount of creditors' claims admitted was Rs. 15·30 lakhs against Rs. 15·07 lakhs in the previous year and the total amount of assets distributed was Rs. 3·77 lakhs against Rs. 3·60 lakhs in 1919. The number of insolvents discharged was 14. The number of insolvency petitions presented in the High Court during the year was 198 against 215 in 1919. The number of petitions disposed of was 244 against 264 in 1919 and the arrears fell from 938 to 899. The number of persons adjudged insolvent was 221 and the number discharged was 145. The total amount of claims admitted during the year was Rs. 14·94 lakhs and the amount paid as dividends to creditors was Rs. 5·42 lakhs. **Insolvency** Mufassal courts High Court

101. The total number of applications for execution received in all the courts in the mufassal taken together, except Village Courts, fell by 6,153 to 348,454. The number of applications disposed of in all the courts was 352,593, and 48,562 were left pending at the end of the year against 50,579 at the end of 1919. Satisfaction was obtained in full in 16·95 per cent of the applications disposed of against 16·98 per cent in the previous year and satisfaction in part in 7·00 per cent as against 7·17 in 1919. The number of wholly infructuous applications fell from 266,319 to 265,976. The number of debtors imprisoned in execution also fell from 2,696 to 2,531 for the whole Presidency. In the mufassal courts other than Village Courts 3,209,450 processes were executed, of which 320,219 were executed by amins and the remainder by peons, giving an average of 159 for each amin and 400 for each peon against 185 and 460, respectively, in 1919. The system of permitting selected District Munsifs of the first and second grades to dictate judgments in open court to shorthand writers worked satisfactorily. The Government have recently been pleased to extend this system and to permit selected District Munsifs of seven years' standing to receive such powers. **Miscellaneous** Execution Processes

102. The total receipts of civil and criminal courts in the Presidency amounted to Rs. 122·14 lakhs or Rs. 0·34 lakh less than in the previous year and the charges rose from Rs. 99·52 lakhs to Rs. 115·47 lakhs, leaving a surplus of Rs. 6·67 lakhs. **Finance**

REGISTRATION (1920) AND COMPANIES (1920-21)

[*G.Os. No. 18, Law (Registration), dated the 11th May 1921, and No. 648, Law (General), dated the 22nd June 1921; Statistics of British India, Vol. I, Commercial, and Vol. IV, Administrative, Judicial, etc.—Joint Stock Companies—Registration*]

Registration

103. During the year the policy of lightening district charges in order to facilitate the exercise of closer supervision and control by the district head was developed and the registration districts of Tanjore, Tinnevelly and Coimbatore-Nilgiris were each bifurcated. The newly-created districts were styled Negapatam, Palamcottah and Erode with headquarters at those centres. The number of district charges accordingly rose from 25 to 28 and of District Registrars from 28 to 31. Measures for the relief of overweighted sub-offices continued to be undertaken and 22 new offices were opened as a permanent measure. The sub-office at Milattur (Tanjore) was transferred to Ayyampettai which is more central to the inhabitants of the tract. The work of the ex-officio sub-office at Nugur (Gōdāvari) having been reduced greatly by restrictions placed on land alienation by the Central Provinces Tenancy Act, that sub-district was amalgamated with Bhadrachalam. An additional permanent sub-registrar was sanctioned for each of the offices of the Registrars of Kistna and Salem and for the sub-offices of Chidambaram, Namakkal, Quilandi and Payyoli, where work had increased greatly in volume and relief could not be given by the opening of new offices owing to lack of suitable centres. The temporary office at Podili (Nellore) was continued and three new sub-offices were opened during the year as an experimental measure at Kosigi (Bellary), Guduru (Kurnool) and Adirampatnam (Tanjore). In consequence of these changes and of the conversion of the sub-offices at Negapatam, Palamcottah and Erode into Registrars' offices, the number of separate sub-offices rose from 493 to 513 and of sub-registrars from 529 to 560. Readjustments of jurisdiction of sub-districts were effected in fourteen districts by the transfer of villages from one sub-district to another so as to promote the convenience of the public. The abnormal conditions prevailing in 1919, which witnessed the full after-effects of the war and the investment in land on a large scale of the enormous war profits, were absent in 1920: and this with the instability of the money market, the unsettled conditions of trade due to fluctuations in exchange and the high prices of the necessaries of life which hit hard the middle and poorer classes leaving them little, if anything, for investment, produced from May onwards a steady decline in registrations which fell from 1,666,358 to 1,561,936 or by 6·27 per cent. The decrease occurred in all the districts except Ganjām, Vizagapatam and Kistna where there was a slight rise in consequence of unfavourable seasons, and Calicut and Palghat where the trade in coconut products revived. Special causes which led to an appreciable fall in individual districts were in North Arcot the slump in the leather trade; in South Arcot and Trichinopoly a drop in the price of groundnuts; in Tanjore and Negapatam heavy rains and floods; in Salem and Madura the prevalence of plague; in Guntūr a fall in the prices of cotton and chillies; and in Tellicherry a fall in the price of pepper. All classes of documents were affected except compulsory leases other than perpetual leases, which increased by 558. Documents affecting immovable property formed, as usual, the bulk (95 per cent) of the transactions. Mortgages fell by 7·14 per cent. The fact that, while sales of the value of Rs. 100 and upwards decreased by 4·93 per cent, those of lower values dropped by 11·51 per cent, affords an indication of the rise in the value of immovable property. Wills and authorities to adopt also fell by 13 per cent. Notwithstanding the decrease in registrations, the aggregate value rose from Rs. 62·80 to Rs. 64·76 crores or by 3·12 per cent, of which 2·84 per cent was contributed by registrations affecting immovable property. The average value of a document increased from Rs. 380 to Rs. 418 and the average fee from Rs. 1-9-6 to Rs. 1-10-7, indicating thereby the rise in the value of

Registrations

immovable property. Applications for encumbrance certificates numbered 50,469 against 48,641 and those for copies 129,280 against 128,876 in the previous year. Promptitude was maintained in the transcription and return of documents and the system of returning documents by post became increasingly popular. Documents presented by or on behalf of co-operative societies dropped from 25,380 to 23,355, but searches rose from 2,682 to 3,332, the fees foregone being Rs. 65,887 against Rs. 60,223. Ten cases of **Prosecutions** prosecutions under the Indian Registration Act were pending at the commencement of the year and an equal number was newly instituted. Of these, six ended in conviction and seven in acquittal, leaving seven pending. Consequent on a decline in registrations, the income from fees **Finance** on registrations fell from Rs. 26·55 to Rs. 25·96 lakhs and other receipts from Rs. 0·25 to Rs. 0·20 lakh. Although there was a partial compensation from an increase under other operations, such as searches and copies, the total income fell from Rs. 32·70 to Rs. 32·19 lakhs. The expenditure rose from Rs. 17·46 to Rs. 21·92 lakhs consequent on the grant of local allowances for high prices and the constitution of new districts and sub-districts. The experiment in connexion with the maintenance of a record of rights, **Miscellaneous** more properly a register of holdings, started in October 1919 was continued and worked successfully. Four meetings of Registrars and one meeting of sub-registrars were held by the Inspector-General of Registration, at which useful discussions took place of matters of departmental interest. The powers vested in the Governor-General in Council under the Registration Act were transferred to the Local Government by the Devolution Act, 1920.

104. The number of Assistant Registrars of Joint-stock Companies **Registered companies** increased from 27 to 31 owing to the formation of four new registration districts. Notwithstanding the adverse effects of the world trade depression, the fluctuations in exchange and the instability of the money market, 120 companies were registered against 86 in the previous year, raising the total number of working companies from 486 to 576. Trading and industrial concerns constituted nearly 75 per cent of the new registrations, a sign of the industrial awakening. A number of private partnership firms converted themselves into limited companies and sought registration evidently with a view to secure increased capital for the expansion of their business; and the registrations were 34 in excess of 1919–20. The largest company registered was the Buckingham and Carnatic Company, Limited (authorized capital Rs. 250 lakhs) which was reconstructed by the amalgamation after winding up of five mills under the management of Messrs. Binny & Co. (Madras), Limited. With the realization by the public of the advantages of speedy transit, companies are rapidly coming into existence to secure motor bus services: and of the five companies coming under this group, four are purely Indian and one partly Indian and partly European. The rapid rise in house-rents and in the value of house-sites in Madras City brought into existence three companies with the object of acquiring houses, buildings and sites. The only outward sign of the non-co-operation agitation was the return by a society registered in the North Arcot district under the Societies Registration Act, 1860, of the certificate of registration. Ten "not-for-profit" associations obtained licences under section 26 of the Indian Companies Act, 1913, and the number of registered associations increased from 43 to 51. There was no case of conversion of a public into a private company or vice versa. Thirty companies (6 banking and loan, 22 trading and industrial, and 2 classed "as others") ceased to exist. The aggregate authorized and paid-up capital of all companies further increased from Rs. 14·84 crores and Rs. 7·09 crores to Rs. 20·76 crores and Rs. 9·28 crores, respectively, and the average paid-up capital from Rs. 1·63 lakhs to Rs. 1·79 lakhs. The percentage of the paid-up to the authorized capital, however, dropped from 48 to 45 as a result of the inrush of a comparatively large number of floatations on a tight market and also of the tendency to boom new companies with unduly large authorized capital. The number of companies registered outside British India but having a

place of business in this Presidency increased from 140 to 146. Insurance companies formed the bulk, 61 out of the 146 being of that class. One company which failed to have the balance sheet audited was convicted and fined. The receipts and expenditure were Rs. 37,750 and Rs. 15,183 against Rs. 26,462 and Rs. 14,034 respectively in the previous year. Revised rules were issued restricting the issue of auditors' certificates to the holders of the Bombay Government Diploma in Accountancy and to the existing holders of temporary restricted and unrestricted certificates. At the close of the year there were 6 holders of permanent unrestricted certificates, 8 of permanent restricted certificates, 18 of restricted certificates without limitation of time and 6 of temporary restricted certificates. No society was registered under the Provident Insurance Societies Act, 1912. There were 12 Provident Insurance Societies and six Life Assurance Companies working at the close of the year.

Provident Insurance Societies Act, 1912

Notaries Public (1920-21)

105. Owing to the formation of the registration district of Palamcottah, that station was added to the notarial stations raising their total number to 143. The number of registering officers exercising the functions of a Notary Public also increased from 187 to 196, due to the constitution of four new registration districts and the appointment of an additional sub-registrar in each of two Registrars' offices and three sub-offices. The operations during the year were confined to 18 stations and of these Tuticorin and Calicut stood prominent. The total number of instruments dealt with rose from 70 to 122, the increase being due to the unfavourable trade conditions, the stringency of the money market and the havoc committed on crops by floods in November 1920 and January 1921. With the increased operations, the aggregate value of transanctions rose from Rs. 1·39 lakhs to Rs. 1·61 lakhs. The fees realized amounted to Rs. 468-4-0 against Rs. 291-14-0 in 1919-20 and a sum of Rs. 20-15-6 was expended by Notaries Public, the latter being practically the same as in the previous year. The balance of Rs. 447-4-6 was remitted to the treasury. No office of a Notary Public was inspected by the District Judge under rule 4 of the Notarial Rules.

CO-OPERATIVE SOCIETIES

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Report on the working of the Co-operative Societies Act (II of 1912) for the year 1920-21; Statistics of British India, Volume II Financial Statistics, Part I, Co-operative Societies*]

General

106. In December 1920, the Government sanctioned the creation of a post of Joint Registrar to afford relief to the Registrar in certain branches of work. The post was, however, abolished with effect from the 17th March 1921 in deference to the wishes of the Legislative Council. In pursuance of the scheme of development of the co-operative movement referred to in the report of last year, permission was accorded to open two more independent administrative sections with headquarters at Ganjām and Nellore. At the end of the year there were altogether 17 such sections. Seventeen gentlemen were appointed Honorary Assistant Registrars during the year bringing up the total to 55 and the staff of Inspectors was increased from 320 to 367. There were 6,289 societies on the register on the last day of the year as against 5,027 on the corresponding day of the previous year. Of these, 1,297 societies were registered during the year against 1,365 registered in the previous year. The slight fall in the number of societies registered was due to the financial stringency which prevailed, particularly in the earlier part of the year, and the consequent difficulty in finding money to finance new societies. In certain areas it was found necessary to limit the registration of new societies in order that the consolidation of the work of societies started in the previous year might receive adequate attention. The total number of societies was made

up of 33 financing banks (including the Provincial bank), 179 unions (both supervising and propagandist), 5,821 credit societies, 216 purchase and sale societies, 13 production and sale societies and 27 others. There were two federations of unions which in addition to their federal functions also exercised supervision over primary societies which were not affiliated to any local union. The total number of primary societies under the control of supervising unions on the 30th June 1921 was 4,410 as against 3,540 at the end of the previous year. Of the two propagandist unions, one was at Madras and other at Masulipatam ; their chief objects were to propagate the principle of co-operation and to serve as exponents of non-official co-operative opinion. There were 398,062 members in 6,110 societies, excluding supervising unions. The total working capital of all societies increased from Rs. 394·24 lakhs to Rs. 490·35 lakhs and the total paid-up share capital from Rs. 50·24 lakhs to Rs. 64·86 lakhs. Deposits by individuals increased from Rs. 153·96 lakhs to Rs. 177·76 lakhs and the reserve fund of all societies rose from Rs. 17·42 lakhs to Rs. 20·77 lakhs. Loans from central banks to primary societies increased from Rs. 131·66 lakhs to Rs. 153·03 lakhs. The net profits of the year amounted to Rs. 3·90 lakhs. The total cost of working the Act to Government was Rs. 5·35 lakhs.

Working of societies

Provincial and central banks

107. Eight central banks took shares in the Provincial bank during the year. A sum of Rs. 1·34 lakhs was paid towards share capital by central banks to the Provincial bank. To suit the changed constitution of the latter, the loans already given to primary societies and outstanding against them were gradually being transferred to the central banks to which they were affiliated. In this way the indebtedness of primary societies to the Provincial bank was reduced from Rs. 24·59 lakhs at the beginning of the year to Rs. 9·03 lakhs at the end of the year. Including the liabilities transferred in this way, loans made by the Provincial bank to central banks increased from Rs. 25·90 lakhs to Rs. 52·74 lakhs. Of the three central banks started during the year, the one at Hospet finances societies in the Bellary district ; the second at Tanjore, those in the taluks of Tanjore, Mannārgudi, Pattukkōttai and Arantangi ; and the third at Srīvilliputtūr, those in the taluks of Sāttūr and Srīvilliputtūr. The only districts which are still without district central banks of their own are Madras city and the Nilgiris. The Christian Central Bank, Madras, however, finances societies in the city of Madras and the Nilgiri societies are affiliated to and financed by the Coimbatore District Bank. Arrangements for financing primary societies by district central banks have thus been completed for the whole Presidency. The arrangement in force in certain districts in the previous year by which primary societies on the unlimited liability basis were required to invest the whole of their paid-up share capital in the shares of the central bank financing them, was extended to other districts during the year. As a result, the share capital of central banks was considerably strengthened during the year. Thus no difficulty need be anticipated in regard to central banks finding within the movement itself the share capital required as the basis for the expansion of their credit. The amount borrowed by all the financing banks (including the Provincial bank) from outside the movement was Rs. 126·46 lakhs as against Rs. 105·90 lakhs in the previous year. The owned capital of these banks in the movement amounted to Rs. 27·47 lakhs, which is equivalent to 21·73 per cent of the amount borrowed from outside the movement. The total working capital of all the financing banks rose from Rs. 170·85 lakhs to Rs. 230·22 lakhs. Although central banks (excluding the Provincial bank) increased their working capital by Rs. 46·91 lakhs during the year, they were unable for a considerable part of the year to meet all the demands of primary societies. The enhanced rates of interest which were introduced about the end of the previous year and the beginning of the current year, were maintained during the year. This not only prevented large withdrawals of deposits but also enabled the financing banks to attract fresh deposits, the total amount at the end of the year being Rs. 19·31 lakhs in excess of that at the end of the previous year. As

in the previous year, the Imperial Bank of India, Madras Branch, generously assisted financing banks with liberal overdrafts. The orders of Government permitting contractors and employees of municipalities and local boards and also jail contractors to invest their security deposits in central banks added appreciably to the resources of central banks. Owing to the tightness of the money market, the financing banks were not in a position, at least for a considerable portion of the year, to give long term loans to societies. Nor could the members of these societies secure such loans outside the society. The result was that members were reluctant to utilize the sale-proceeds of their produce in paying off their dues to their societies.

Agricultural societies

The number of agricultural credit societies rose, by 1,051, to 5,207, of which eight were on a limited and 5,199 on an unlimited liability basis. In the agricultural societies of all classes there were at the end of the year 280,299 members, including 37,533 non-agriculturists and 31,696 dependent partly on agriculture. Of the 211,070 members wholly dependent on agriculture, 21,217 were non-cultivating landholders, 146,277 cultivating landholders, 30,700 tenants and 12,876 field labourers. There was an increase over the previous year's figures in the numbers of tenants and field labourers admitted as members. Separate societies are being formed, where necessary, for field labourers and the depressed classes. The total working capital of all agricultural credit societies increased from Rs. 156·86 lakhs to Rs. 184·48 lakhs and the paid-up share capital from Rs. 14·07 lakhs to Rs. 18·20 lakhs. The deposits made by individuals rose from Rs. 12·90 lakhs to Rs. 13·98 lakhs. The loans from financing banks rose from Rs. 121·13 lakhs to Rs. 141·92 lakhs. 2,158 societies worked at a profit and the remaining 3,049 at a loss. There was an appreciable increase in the loans given by agricultural societies for cultivation expenses and productive purposes. Loans for purchase of food and necessaries of life also showed a marked, though smaller, increase. A good deal of work was done by agricultural societies in other directions also.

Non-agricultural societies

The number of non-agricultural credit societies rose from 478 to 614, of which 464 were on the limited and 150 on the unlimited liability basis. The number of members in these societies increased from 75,141 to 92,032 and the paid-up share capital from Rs. 14·70 lakhs to Rs. 18·26 lakhs. The deposits rose from Rs. 29·36 lakhs to Rs. 33·21 lakhs and the total working capital from Rs. 53·10 lakhs to Rs. 62·23 lakhs. The net profit amounted to Rs. 2·05 lakhs against Rs. 1·68 lakhs in the previous year. As in the previous year many societies worked for the exclusive benefit of particular classes. There were 32 weavers' societies, 16 building societies, two societies for printing, two for supply of labour, one for managing a hostel for students, one for supply of stationery and other articles to students and lastly one conveyance (motor-bus) society. The Madras Central Co-operative Printing Society was started to undertake printing for all co-operative societies in the Presidency. Seventeen central banks, 18 local supervising unions and 56 primary societies have already taken shares. Steady progress continued to be made in the formation of societies for the depressed and backward classes, 253 such societies having been registered during the year. The number of Adi Dravida members of societies of all classes increased during the year from 22,778 to 33,409. At the end of the year, there were 48 societies exclusively for scavengers or for municipal employees to which scavengers were admitted. In regard to most of these societies municipal chairmen and other officers of municipalities gave not only sympathy but active help in their administration. In the Nilgiris there were 60 societies for Badagas, four for Kotas and two for Todas. The steady expansion of the co-operative movement in the Nilgiris is mainly due to the generous way in which the Coimbatore bank has been financing the societies. One society for the Malayalis of the Javadi hills in the North Arcot district, three for the Malayalis of the Kollimalai hills of the Salem district and 11 for maritime fishermen in the South Kanara and Malabar districts were registered during the year.

Miscellaneous

108. As a general rule, primary societies, both agricultural and non-agricultural, invest their reserves in central banks ; central banks in the Provincial bank ; and the Provincial bank in the Imperial Bank of India, Madras. But some societies including the Provincial bank and certain central banks have invested parts of their reserves in war bonds. The Provincial bank relies for its resources mainly upon deposits from individuals, central banks upon deposits from individuals and loans from the Provincial bank, non-agricultural societies on share capital and deposits, and agricultural societies on central banks. The total number of supervising unions rose from 136 to 177, and 4,410 primary societies were affiliated to them as compared with 3,540 at the end of the previous year. There were still 1,132 agricultural societies not affiliated to any supervising union at the end of the year. In areas, where there were no local supervising unions or other supervising bodies, supervision work was done by the Government staff. In areas, where the local supervising unions were unable to find the full amount of money required to maintain the necessary supervising staff, the Government staff helped the union in the work of supervision. Resort to civil courts was on the decline and arbitration was becoming more and more popular with societies. For some years the number of arbitration awards pending execution had been on the increase, the reason being that there were certain practical difficulties in the way of executing awards through civil courts. The Government accordingly framed a rule in June 1920 permitting such awards to be executed by the application of the Land Revenue Recovery Act (Act II of 1864). One hundred and one societies were under liquidation at the end of the year. The Madras Provincial Co-operative Conference was held in Madras in December 1920 and the Andhra Co-operative Conference at Rajahmundry in October 1920. District conferences were held during the year at nine places. There was also an Agricultural and Industrial Exhibition at Kalavai, North Arcot district. In addition, there was a large number of union conferences held at various union centres throughout the Presidency. The Madras Co-operative Manual by F. R. Hemingway, Esq., I.C.S., has now been published. The attitude of the general public towards the co-operative movement continued to be as sympathetic as in previous years. The relations between officers of the financing banks and the officers of the department were exceedingly harmonious.

LOCAL BOARD ADMINISTRATION (1920-21)

[*Statistics of British India, Vol. IV, Local Self-Government—District and Sub-District Boards*]

General

Constitution and strength of boards

109. During the year, the new Local Boards Act, 1920, was passed, but it came into force only from the 1st April 1921. The number of district boards in the Presidency, excluding Koraput, was 24 and the total strength of members on the 31st March 1921 was 863. At the end of the year 728 members took part in the deliberations of district boards in the Presidency other than Kistna and Koraput for which figures have not been received. Of these 117 were ex-officio, 147 nominated by Government and the remaining 464 elected by taluk boards, the corresponding figures for the previous year being 125, 195 and 483, respectively, for all district boards. Three hundred meetings were held by district boards other than Koraput and Malabar. The number of taluk boards rose from 97 to 119 including seven which were formed on the 31st March 1921. The number of boards which elected their own presidents increased from 13 to 38, and 53 others or 3 more than in the previous year had non-official presidents. The sanctioned strength of taluk boards increased, by 35, to 1,843. The actual number of members at the end of the year on the taluk boards in the Presidency except the Kistna district, was 1,705, of whom 164 were officials

District boards

Taluk boards

and 1,541 non-officials as against 264 and 1,339, respectively, in all districts in the previous year. Of the 524 seats open to election in the year (except in Bezwada and Malabar for which figures are not available), 515 were actually so filled, and in the case of 265 elections which were contested, 32·4 per cent of the registered voters came to the poll as against 47·8 in 1919–20. The number of seats which had to be filled up by presidents of district boards by nomination, because no candidates were proposed, fell from 28 to 4. One thousand four hundred and thirty-six meetings or 166 more than in 1919–20 were held by taluk boards other than Bezwada and those in the Malabar district. The number of union boards which assisted in the administration of local affairs in important villages rose, by 12, to 589. The actual number of members on the 31st March 1921 on these boards in the Presidency, except those in Gōdāvari, Kistna and Malabar districts, was 4,512, of whom 915 were village headmen, 2,326 were nominated and 1,271 elected.

Union boards

Finance

Receipts

110. The land cess was levied at As. 2 on every rupee of the land receipts assessment on the Nilgiris, at rates varying from As. 1–6 to As. 2 in Malabar, at As. 1–6 in South Kanara and at one anna in the remaining districts. In addition, a special cess of 3 pies in the rupee on the annual rental value of all occupied lands was levied in sixteen districts for the construction of railways. Tolls upon carriages, carts and animals were collected in all districts. House tax was collected in all unions. The maximum rates were in force in 518 cases, three-fourths in 52, three-fifths in one, and half-rates in the remaining 15. The cash balance under local funds except those of minor unions at the beginning of the year was Rs. 127·53 lakhs. The total receipts amounted to Rs. 255·36 lakhs. Including the receipts from the special railway-cess, the revenue from rates and taxes was Rs. 104·45 lakhs. There was a rise under land and railway cesses in six districts and a fall in the remaining districts. The income from tolls showed an improvement in eight districts, noticeable increases occurring in Chingleput, Madura, Nellore and South Kanara. The total income under this head, however, showed a slight decline (Rs. 0·30 lakh). The grants received from Provincial funds amounted to Rs. 56·84 lakhs. A sum of Rs. 17·28 lakhs was granted from Provincial funds in aid of the general resources of local boards, but only Rs. 15·57 lakhs were disbursed in the year; Rs. 34·56 lakhs were granted for education, Rs. 5·18 lakhs for roads and bridges, Rs. 0·81 lakh for hospitals and dispensaries, Rs. 0·24 lakh for minor sanitary works, and Rs. 0·48 lakh for water-supply and drainage schemes. A grant of Rs. 1·08 lakhs for public works was paid as usual to the Nilgiri District Board in consideration of the smallness of its revenues. The contributions to the general resources of local boards included lump assignments intended for the equipment and adequate maintenance of elementary schools. The grants towards hospitals and dispensaries were intended to meet the Provincial share of the pay and allowances of medical subordinates employed by local boards and half the cost of the maintenance and equipment of hospitals and dispensaries opened after 1915.

Expenditure

111. Excluding the charges relating to debt heads (Rs. 41·26 lakhs), the total expenditure of local boards was Rs. 252·72 lakhs and the year closed with a balance of Rs. 88·91 lakhs. The outlay on public works rose, by Rs. 26·30 lakhs, to Rs. 129·83 lakhs; the length of new roads constructed, except in Kistna and Malabar for which figures have not been received, was 173 miles against 158 miles in all districts in the previous year; the expenditure on this account was Rs. 2·47 lakhs against Rs. 2·78 lakhs. 24,279 miles of road were maintained and the outlay thereon increased from Rs. 51·77 lakhs to Rs. 53·07 lakhs. At the close of the year, local boards except those in the Malabar and Kistna districts maintained 35 sessional schools for the training of teachers, one Sanskrit college, 4 industrial schools, 134 secondary schools and 7,180 elementary schools. In the sessional schools 446 students received instruction and the total attendance at all schools fell, by 66,698 pupils, to 398,592 pupils. The total expenditure of local boards on education was Rs. 58·32 lakhs as against Rs. 46·80 lakhs in the previous year, towards

Public works

Education

which fees contributed Rs. 6·41 lakhs, while contributions from Provincial funds, municipal councils and private individuals amounted to Rs. 35·11 lakhs. The net local fund outlay was thus Rs. 16·80 lakhs or about 15 per cent of the total ordinary income of local boards as against Rs. 14·19 lakhs and 16·5 per cent in the previous year. The number of hospitals maintained by local boards other than those in the Kistna and Malabar districts was 99 and the number of dispensaries 279. The cost of their maintenance amounted to Rs. 16·58 lakhs, and 3,942,719 patients were treated in them. The number of vaccinators including probationers employed by local boards other than those in the Malabar and Kistna districts was 418. The average cost of each successful operation was As. 6–2. The total expenditure on sanitation amounted to Rs. 5·12 lakhs, while that on water-supply, both new works and repairs, amounted to Rs. 4·49 lakhs.

Medical institutions

Vaccination

Sanitation

112. The only District Boards which possess open railways are those of Tanjore, Coimbatore, Guntūr, Salem and Kistna. The balance in Government securities in favour of the railway-cess fund of the Tanjore District Board at the beginning of the year was Rs. 33·74 lakhs ; there was besides a balance of Rs. 1·87 lakhs in cash. The gross traffic earnings increased, by Rs. 1·37 lakhs, to Rs. 12·36 lakhs and the working expenses also rose, by Rs. 1·69 lakhs, to Rs. 8·44 lakhs. The District Board repaid Rs. 0·71 lakh to Provincial funds towards recoupment of the Government share in the railway, which is treated as a loan, and discharged all debentures with the exception of Rs. 0·05 lakh. The profit derived from the working of the railway was Rs. 3·92 lakhs (against Rs. 4·23 lakhs in 1919–20) or only 5·9 per cent of the capital outlay : and at the end of the year, the balance in favour of the railway-cess fund after taking into account all charges and receipts was Rs. 29·12 lakhs in Government securities and Rs. 5·28 lakhs in cash. The only railway line worked by the Coimbatore District Board is the Podanūr-Pollachi railway for the opening of which in 1915, a debenture loan of Rs. 5 lakhs was raised and interest thereon, viz., Rs. 0·11 lakh per half-year, is being regularly paid. The opening balance of the railway-cess fund was a little over Rs. 6 lakhs in Government securities and Rs. 2·29 lakhs in cash. The gross earnings of the railway were Rs. 2·72 lakhs and the working expenses Rs. 1·23 lakhs. The net profit on the working of the railway was Rs. 1·49 lakhs as against Rs. 1·33 lakhs in 1919–20. At the end of the year, the balance in favour of the fund was Rs. 7 lakhs in Government securities and Rs. 2·91 lakhs in cash. The only line constructed in the Guntūr district is that between Tenali and Rēpalle. The opening balance of the railway-cess fund amounted to Rs. 3·97 lakhs in Government securities and Rs. 1·47 lakhs in cash. The gross earnings of the railway increased from Rs. 1·20 lakhs to Rs. 1·40 lakhs and the working expenses came to Rs. 0·69 lakh. Inclusive of a sum of Rs. 0·20 lakh being the interest on account of investments, the net earnings amounted to Rs. 0·90 lakh or 6 per cent on the capital outlay as against 4 per cent in 1919–20. The closing balance of the railway-cess fund in Government securities was Rs. 5·51 lakhs. The Salem District Board owns a branch railway line from Salem junction to Salem town measuring 3·8 miles. The railway-cess fund opened with a sum of Rs. 7·15 lakhs in Government securities and Rs. 0·13 lakh in cash. The net earnings of the railway amounted to a little over Rs. 0·29 lakh or 6 per cent of the capital outlay as against 6·63 per cent in the previous year. The closing balance of the railway-cess fund amounted to Rs. 7·15 lakhs in Government securities and Rs. 0·15 lakh in cash : and the amount of loan outstanding at the end of the year was only Rs. 0·52 lakh. In Kistna, the railway-cess fund opened with a sum of Rs. 23 lakhs in Government securities and Rs. 1·23 lakhs in cash. The gross earnings of the railway increased by Rs. 0·91 lakh to Rs. 5·70 lakhs and the working expenses by Rs. 0·41 lakh to Rs. 2·57 lakhs. The net earnings of the railway amounted to Rs. 3·13 lakhs or about 14 per cent of the capital outlay as against 11·7 per cent in the previous year. The closing balance of the railway-cess fund amounted to Rs. 23 lakhs in Government securities and Rs. 4·59 lakhs in cash.

Railways

MUNICIPAL ADMINISTRATION—MUFASSAL (1920–21)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

General

113. The new District Municipalities Act, 1920, came into force from the 1st October 1920. The total number of municipal councils rose from 73 to 80. Palacole and Chirala which were constituted municipalities with effect from the 1st December 1919 and 1st January 1920, respectively, began actual work only on the 1st April 1920. During the course of the year, five other municipalities were constituted—Hindupur, Tadpatri, Pollachi, Rēpalle and Sivakāsi. The number of councillors rose from 1,228 to 1,322. The actual number at the end of the year except in Palni was 1,204, of whom 44 were ex-officio, 407 nominated by the Government and the remaining 753 elected by the rate-payers. The system of appointing councillors by election was in force in 71 municipalities. The proportion of Indian to European and Anglo-Indian members increased further and 54 councils consisted entirely of Indian members as against 41 in the previous year. The councils, excluding Bezwada for which statistics are not available, held 2,171 meetings in all or 151 more than in the previous year. Two hundred and fifty-five meetings were adjourned for want of a quorum. The average attendance of councillors at each meeting was 56·98 per cent of the total strength as against 59·5 per cent in 1919–20.

***Finance**

Receipts

114. The opening balance was Rs. 41·70 lakhs. Current receipts, excluding opening balance, amounted to Rs. 106·08 lakhs. Of this Rs. 46·27 lakhs were derived from rates and taxes and Rs. 16·84 lakhs from municipal property and sources other than taxation. The average incidence of taxation per head of the population was Rs. 1–15–10. The grants from provincial funds amounted to Rs. 16·65 lakhs, of which Rs. 10·35 lakhs were for general purposes, Rs. 5·45 lakhs for education and

Loans

Rs. 0·85 lakh for medical relief. Loans amounting to Rs. 2·07 lakhs were advanced by Government as against Rs. 4·50 lakhs in the previous year. The Vellore municipal council took a loan of Rs. 0·85 lakh for its drainage scheme, and the Guntūr municipal council loans aggregating Rs. 0·77 lakh for water-works improvements and a town extension scheme.

Expenditure

115. The expenditure inclusive of debt head charges amounted to Rs. 133·92 lakhs. Expenditure on Public Works amounted to Rs. 21·88

Public works

lakhs, or about 15·58 per cent of the total charges. The Public Works Department had under execution water-works in seven municipal towns as also improvements and extensions to the existing water-works in eight other municipalities and drainage schemes for two towns. A water-supply scheme in one municipality, schemes of improvements to existing water-works in three towns and a drainage scheme in another were sanctioned for execution. Water-supply schemes for nine towns, drainage schemes for four and a scheme of improvements to existing drainage works in another were under consideration. The municipalities main-

Medical

tained 53 hospitals and 48 dispensaries for giving medical relief to the public. The number of in-patients treated fell, by 10,143, to 25,335. There was also a decrease in the number of out-patients, by 208,090, to 1,814,914. The decrease in both cases was due chiefly to the transfer of head-quarter hospitals to the Government control. The cost of maintenance

Education

fell, by Rs. 0·40 lakh, to Rs. 7·57 lakhs. There were 915 educational institutions maintained by municipal councils, or 20 more than in the previous year. The increase was 5 in the number of secondary and 15 in that of elementary schools. The net educational charges amounted to 19·47 per cent of the income from general taxation. The

Sanitation

expenditure on conservancy was Rs. 18·03 lakhs and that on lighting Rs. 4·23 lakhs as against Rs. 17·45 lakhs and Rs. 4·05 lakhs, respectively, in the previous year. The closing balance of the year was Rs. 13·86 lakhs.

Debt

The public debt outstanding against municipalities fell from Rs. 33·61 lakhs to Rs. 30·04 lakhs.

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* The statistics furnished in this and the next paragraph exclude those relating to Bezwada and Mayavaram for which figures are not available.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS (1920-21)

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

Finance

116. The total receipts of the Corporation inclusive of the opening balance amounted to Rs. 64·69 lakhs as against Rs. 58·29 lakhs in the previous year and the expenditure was Rs. 57·18 lakhs against Rs. 52·56 lakhs. The balance at the credit of the Corporation at the end of the year was Rs. 7·51 lakhs as against Rs. 5·73 lakhs in the previous year. The income from municipal rates and taxes was Rs. 34·47 lakhs or Rs. 7·53 lakhs more than in the previous year. Of this increase a sum of nearly Rs. 5 lakhs was due to the levy of profession tax at enhanced rates, to the receipts from the Madras Port Trust which under the old Act was exempt from property tax and to the duty on transfer of property under section 135 of the present Act. A little over Rs. 2½ lakhs of the increase was due to careful revision of property tax assessments during the year. The incidence of taxation per head of the population was Rs. 6-9-6 against Rs. 5-3-1 in 1919–20. The revenue derived from municipal property and powers, apart from taxation, was Rs. 5·40 lakhs or Rs. 3,795 less than in the previous year. The grants and contributions from Government amounted to Rs. 5·40 lakhs as against Rs. 6·42 lakhs in 1919–20 and were made up of a contribution of Rs. 0·40 lakh and a special grant of Rs. 5 lakhs for the improvement of water-supply and drainage works. Miscellaneous receipts amounted to Rs. 4·97 lakhs as against Rs. 7·71 lakhs in 1919–20. This decrease is entirely due to the fact that a sum of Rs. 3·75 lakhs was realized from the sale of the Royapetta Hospital buildings in the previous year, the figures for which cannot therefore be regarded as normal. The debt at the close of the year was Rs. 110·31 lakhs. A sum of Rs. 1·51 lakhs was paid for the repayment of Government instalment loans amounting to Rs. 34 lakhs, and of Rs. 4·72 lakhs for interest on all loans. The sinking funds at the end of the year on account of the several loans, exclusive of the Government instalment loans, amounted to Rs. 30·76 lakhs in Government promissory notes, stock certificates and Madras Municipal debentures and Rs. 4,296 in cash.

Works

117. The expenditure on works amounted in all to Rs. 26·24 lakhs or 44·5 per cent of the total expenditure as against Rs. 20·56 lakhs in the previous year. Of this sum Rs. 12·34 lakhs or 20·9 per cent were spent on new works, Rs. 12·39 lakhs or 21 per cent on repairs and Rs. 1·51 lakhs or 2·6 per cent on establishment, etc. A sum of Rs. 0·80 lakh was spent on new works such as the acquisition of lands and buildings for widening roads and rounding off corners, the construction of culverts and footpaths, and the widening of bridges for laying new tram lines. The amount spent on repairs was Rs. 5·42 lakhs against Rs. 4·48 lakhs in the previous year. During the year 52·66 miles of road were reformed against 35·83 miles in 1919–20. Two miles, 7 furlongs and 71 yards of unmetalled roads were metalled for the first time and 1 mile, 1 furlong and 147 yards of roads were tarred. In addition, 1 mile, 5 furlongs and 37 yards of roads were re-tarred. Repairing of bridges and culverts was also carried out. The expenditure on new works was Rs. 0·52 lakh and that on repairs Rs. 0·20 lakh. Two school buildings which were in progress in the previous year were completed during the year and the construction of two other school buildings was begun. Flush-out latrines were constructed at several places and the construction of a lorry loading station, a laboratory and the dhobikhana buildings which were in progress in the previous year were completed during the year. The construction of dwelling houses for scavengers and of quarters for filter-bed overseers was also completed. A petrol storeroom and a shed for housing the ambulance car were constructed at the Isolation Hospital, Krishnampet. Bathing ghats were provided during the year for the scavengers at Krishnampet hutting ground. The amount spent on drainage works was Rs. 8·48 lakhs and on maintenance Rs. 4·03 lakhs. Owing to the impossibility of obtaining stone-ware pipes from England, sewer-laying was

Communications

Buildings

Drainage

greatly hindered. Pipes were procured from Messrs. Burn & Co., but owing to strikes and other difficulties, this firm was not able to deliver them with any regularity. Sewer laying was done mostly in George-town and Purasawakam areas. The expenditure on water-supply works was Rs. 2·67 lakhs and that on maintenance Rs. 2·73 lakhs. The quantity of water supplied during the year was 5,326·4 million gallons which was equivalent to 27·6 gallons per head per day. The maximum average daily consumption per head in any month was 31·4 gallons and the minimum 22·7 gallons. During the year 15,149 houses were inspected and 1,127 defects in the service pipes were brought to notice. Four hundred and forty-five new services were laid by licensed plumbers and 2,945 were repaired, cleaned, altered or extended. The total number of house service connexions in the city on the 31st March 1921 was 30,708. The length of pipes removed, cleaned and re-laid was 7,880 feet and that of new mains laid 7,356 feet. There were at the close of the year 1,662 fountains, 75 cattle troughs and 13 bathing fountains. The quantity of water supplied to the city as measured at Red Hills was 882,822,158 c.ft. as against 870,492,590 c.ft. in the previous year.

Water-supply

Education

118. The expenditure on education was Rs. 0·94 lakh against Rs. 0·71 lakh in the previous year. The total number of schools at the close of the year was 30 and there were 4,024 boys and 598 girls on the rolls on the 31st March 1921. There were 170 teachers in the Corporation schools and all of them with one or two exceptions were professionally qualified. Besides tailoring in the Corportion school, Kalmantapam Road, and wood work in 23 other schools, tape weaving was introduced in the Corporation school, Edapalaiyam. With a view to improve the strength and secure regularity and continuity of attendance in schools largely attended by the backward classes, the Corporation resolved to provide destitute children with tiffin or a midday meal. The experiment is being carried on in the Corporation school, Thousand Lights.

Sanitation and medical services

119. A sum of Rs. 8·25 lakhs or 14·01 per cent of the total expenditure was spent on sanitation and conservancy during the year as against Rs. 8·75 lakhs in the previous year. The cost of maintenance of the Corporation hospitals and dispensaries amounted to Rs. 1·21 lakhs as against Rs. 0·95 lakh in 1919–20. The total number of patients treated in them was 232,629 against 179,275 in the previous year. The usual contributions of Rs. 0·20 lakh to Government on account of hospitals and of Rs. 0·51 lakh to other medical institutions were paid. The amount spent on vaccination and registration of births and deaths was Rs. 0·36 lakh as against Rs. 0·38 lakh in the previous year. The total number of cases vaccinated in the city in the calendar year 1920 was 25,074 against 32,231 in the previous year and the percentages of success in primary vaccination and re-vaccination cases were 78·9 and 34·9, respectively, as against 95·77 and 46·07 in 1919. The number of children under one year that were vaccinated was 14,494. The number of births and deaths registered in 1920 was 21,396 and 21,418, respectively, as against 18,936 and 27,187 in 1919. The number of attacks and deaths from plague was 11 and 8, respectively. The number of rats caught and destroyed was 46,985 making a total of 2,623,486 since the beginning of the operations in July 1898. The number of tanks cleaned and re-cleaned during 1920 was 1,113 ; 5,900 pits and cesspools, 141 tanks, 1,580 ponds, 16 low lands and 59 wells were also petrolized every week. 4,148 wells were examined to ascertain whether the fish that had been introduced in them were alive and in 2,496 or 57·7 per cent the wells were found to be fishless.

Hospitals and dispensaries

Vaccination and registration of births and deaths

Plague

Anti-malarial operations

Miscellaneous

120. A sum of Rs. 4·51 lakhs was spent on lighting, and the cost of maintenance alone amounted to Rs. 1·41 lakhs. During the year 799 new electric lights were installed and 23 removed. The number of electric lights on the 31st March 1921 was 4,371. There were also 2,837 oil lamps. The public parks were maintained at a cost of Rs. 0·91 lakh as against Rs. 0·51 lakh in the previous year. The cost of the maintenance of fire engines was Rs. 0·23 lakh against Rs. 0·24 lakh in 1919–20. There were 60 fire calls during the year but the engines worked only in 23 cases.

MILITARY—AUXILIARY FORCE, INDIA (1920–21)

121. As a result of the inauguration of the Auxiliary Force, India, the several units of the old Indian Defence Force attached to the 9th (Secunderabad) Division were disbanded and re-constituted during the year. Ten new units were formed with a total strength of 4,593 men (3,552 trained and 1,041 untrained). The Madras and Southern Mahratta Railway Battalion was the largest with 1,227 men and No. 5 Company, Royal Garrison Artillery, the smallest with 117 men. The members of the Royal Garrison Artillery were complimented for their smart turn-out in lining the streets on the occasion of His Royal Highness the Duke of Connaught's visit to Madras. The armoury at Negapatam was maintained throughout the year, and 27 non-commissioned officers and men were mobilized there for a few days to prevent looting of shops. A decision was reached to detach the planters of Coorg and Mysore from the Bangalore, Coorg and Mysore Battalion, and to constitute them as a separate unit; but this was not given effect to owing to the difficulty experienced in finding a Commandant.

MARINE (1920–21)

[*Reports of the Madras Port Trust and the Madras Port Department for 1920–21; Statistics of British India, Vol. IV, Local Self-Government—Port Trusts. Accounts relating to the Sea-borne Trade of British India. Annual Statement of the Foreign Sea-borne Trade and Navigation of British India*]

Madras Port Trust

Finance

122. During the year the receipts of the Port Trust on revenue account from all sources amounted to Rs. 29·59 lakhs as against Rs. 25·50 lakhs in 1919–20, an increase of about 16·04 per cent. But a sum of Rs. 3·35 lakhs of the receipts is ascribable to the imposition of the 75 per cent super dues on imports and exports up to the 1st October 1920, the date on which the revised scale of rates came into force and the super dues of 75 per cent were withdrawn. If contributions made from revenue surplus to capital which amounted to Rs. 5·10 lakhs be not counted, the gross expenditure was Rs. 20·00 lakhs or 67·59 per cent of the gross receipts. Excluding from working expenses the interest on loans which amounted to Rs. 5·68 lakhs, actual working expenses came to 48·39 per cent of harbour earnings against 43·73 per cent in 1919–20. The harbour dues alone, excluding charges for specific purposes, such as cranage and storage, came to Rs. 14·73 lakhs. A sum of Rs. 1·19 lakhs was paid to the Corporation of Madras on account of property tax.

Works

123. During the year, the steel work of the caisson, weighing about 250 tons, which when sunk and filled with concrete will form the head of the rebuilt portion of the sheltering arm, was put together and placed in position. The work of filling up, to the level of the surrounding yards, certain low-lying parts of the south accretion of the harbour was in progress and 2·5 acres of additional stacking ground was made available for coal and timber. The increased traffic at the west quay necessitated a better surface to work over and, although further settlement was possible, it was considered advisable to put down the permanent pavement. During the year 93,877 square feet of the temporary paving was lifted and relaid on 1 foot of concrete and grouted with cement. Estimates totalling Rs. 2·89 lakhs were sanctioned for the remodelling of the railway lines on the south accretion and for improved passenger accommodation at the south quay. When this work is completed, an additional area of 10 acres with a complete lay-out of sidings will be available for the storage of coal, ore and other rough goods. At the close of the year an area of 2½ acres of the new ground was in use. Hitherto all cranes in the timber area had been worked by hand, but to quicken the work an hydraulic crane was installed to lift floating logs out of the timber

pond. The erection of the last of the three warehouses was completed and it was brought into use during the year, thus adding 56,000 square feet or 1¼ acres, to the covered storage space in the harbour. The suction dredger " Madras " worked for 78 days in deepening and maintaining the entrance channel and was also engaged for four months inside the harbour. She underwent a special survey at Calcutta and maintained her previous class of A-I at Lloyds.

Trade

124. The total tonnage of goods which passed through the port in the year amounted to 848,756 tons against 940,564 tons last year, imports contributing 717,740 tons and exports 131,016 tons against 781,263 and 159,301 tons, respectively, in the previous year. With the passing away of the famine conditions of the previous year there was a heavy fall in grain imports by about 36·53 per cent, while the opening of the oil installation in coast ports, temporarily closed during the war, accounted for the drop in imports of kerosene oil which amounted to 59,091 tons as against 105,988 tons in the previous year. With these exceptions practically all heads of imports showed increases, notably coal, metals and timber. The imports of timber, chiefly teak from Burma, were the largest on record totalling 42,363 tons against the eighteen-year average of just under 27,000 tons. Owing to large stocks in the European markets the exports of hides and skins were only 7,319 tons against an eighteen-year average of over 16,000 tons. Towards the end of the year there were signs of a revival in exports under this head. The value of private trade in foreign merchandise from foreign ports amounted to Rs. 2,129 lakhs against Rs. 1,065 lakhs in the previous year, while that of the Indian merchandise from Indian ports was Rs. 462 lakhs against Rs. 588 lakhs in 1919–20. The value of Indian merchandise to Indian ports was Rs. 136 lakhs against Rs. 185 lakhs in the previous year and of Indian merchandise to foreign ports Rs. 762 lakhs against Rs. 1,711 lakhs in the previous year. The value of the private trade of the port represented 50 per cent of the trade of the whole Presidency.

Minor ports

Finance

125. The receipts of Port, Marine and Coast Light Funds amounted to Rs. 15·92 lakhs and the expenditure to Rs. 13·18 lakhs. The closing balance consisted of Rs. 7·08 lakhs in cash and Rs. 15·23 lakhs in Government securities. The collections from port dues increased from Rs. 2·24 lakhs to Rs. 2·73 lakhs, and those realized under coast light dues from Rs. 1·76 lakhs to Rs. 2·21 lakhs. The aggregate value of the sea-borne trade on private account at the outports was Rs. 34·87 crores as against Rs. 34·61 crores in the previous year. Tuticorin for the first time lost its place in favour of Cochin as the first of the outports in the total value of trade. 18,376 vessels with an aggregate tonnage of 3,874,609 tons entered various outports during the year, the corresponding figures for the previous year being 18,852 and 2,937,998 tons. A larger number of steamers were engaged in trade during the year, which accounts for the increase in tonnage with a decrease in the number of vessels. The total number of passengers that arrived at, and sailed from, the various outports decreased from 490,408 to 474,289 and this was chiefly due to the stagnation in rubber trade in the Malay States and the reduced demand for labour in Ceylon.

General

126. The report of Messrs. Wolfe, Barry, Lyster and Partners, Harbour Experts, London, on the development of harbours at the ports of Cocanada, Negapatam, Tuticorin, Mangalore and Malpe was received during the year. A special harbour engineer was appointed to advise and carry out works of harbour improvements at minor ports and a number of preliminary investigations and experiments were carried out by him in connexion with the Cochin Harbour scheme. A committee of fifteen members was also appointed to consider and report on several points connected with the development of the Cochin harbour. Dredging operations for the maintenance of boat channels were conducted as usual at the ports of Cocanada, Cuddalore, Negapatam and Mangalore. The total number of shipping casualties fell from 31 to 12 and there were

three boat accidents resulting in the loss of thirteen lives in all. Coast lights as well as port lights were exhibited throughout the year without interruption. The acetylene automatic unattended light at Gopālpūr continued to work satisfactorily. The working of the port rules and regulations was satisfactory and the supply of boats was equal to the demand at the several ports. Port officers were placed on a revised scale of pay.

MORTALITY FROM WILD ANIMALS AND SNAKES (1920)

[*Report on the mortality caused by wild animals and snakes and the measures adopted for the destruction of wild animals during the year 1920; Statistics of British India, Volume III, Public Health, Deaths from and destruction of wild animals*]

Mortality

127. The number of persons killed by wild animals was 783 and by snakes 1,119 as against 568 and 1,263, respectively, in the previous year. The mortality from wild animals was, as usual, highest in Ganjām and Vizagapatam and, as in previous years, was caused mostly by tigers. More than 100 deaths from snake-bite occurred in Malabar. South Arcot, Tanjore and Trichinopoly also returned high numbers.

Wild animals

Snakes

Rewards

128. A total sum of Rs. 18,899 was disbursed in rewards for the destruction of wild animals.

MISCELLANEOUS (1920)

[*Reports on the working of the Indian Arms and Explosives Acts; Return of sulphur licences in force during the year 1920*]

Arms, explosives and sulphur

129. The total number of licences issued under the Indian Arms Act increased, by 4,500, to 56,212. The increase is mainly due to the fact that under the new Arms rules persons hitherto exempted by reason of their nationality or otherwise are required to take out licences. Licences to carry arms for sports, protection or display, numbered 41,568 or 6,500 more than in the previous year, while those issued for the destruction of wild animals doing injury to crops or cattle decreased, by 2,059, to 13,283. The number of breech-loading weapons licensed, which has been steadily increasing in recent years, again rose from 9,300 to 12,326. There was also an increase (590) in the number of revolvers licensed. The total number of licences under the Indian Explosives Act rose, by 135, to 10,855. The number of prosecutions under the Arms and Explosives Acts and the percentage of conviction were both slightly lower as compared with the previous year. There was one case of illicit manufacture of fire-arms in Kāsaragōd taluk, South Kanara district, and the offender was convicted. The number of sulphur licences granted increased by 27, but the quantity for which licences were obtained was nearly twice that of the previous year.

CHAPTER IV

PRODUCTION AND DISTRIBUTION

AGRICULTURE (1920–21)

[*Report on the operations of the Department of Agriculture and the Administration Report of the Civil Veterinary Department, Madras Presidency, for the year 1920–21 (G.Os. No. 2260, Development, dated the 6th December 1921, and No. 2174, Development, dated the 23rd November 1921); Agricultural Statistics of India, Vol. I, British India*]

General

130. The cadre of the department in all its branches was increased during the year. Ten new appointments in the Indian Agricultural Service were sanctioned, and the Madras Agricultural Service was strengthened by the addition of six gazetted officers. The post of Curator of the Government Gardens and Parks, the Nilgiris, was included in the cadre of the Madras Agricultural Service, consequent on the transfer of the control of the gardens to this department. The Pumping and Boring Section was retransferred to the Director of Industries. A new post of Statistical Assistant to the Director of Agriculture was also sanctioned. The subordinate executive staff was augmented by the recruitment of 25 upper and 19 lower subordinates in the Science and Agricultural sections. Two new agricultural stations were established at Coonoor on the Nilgiris —a pomological station for testing stocks of fruits and methods of grafting and for the production of nursery trees for the benefit of intending purchasers : and a farm station for rearing silk worms at a high altitude to supply "seed" to silk growers. The three experimental stations established in the previous year at Siddapur (Coorg), Peermade (Travancore), and Mooply (Cochin) for coffee, tea and rubber, respectively, were brought into working order as well as a fourth station for the study of rubber at Tenmalai (South Travancore). Preliminary steps were taken during the year towards the construction of a new college building and additional quarters for officers at Coimbatore. By far the most notable event of the year in regard to agricultural education was the introduction of a new scheme for the complete separation, from the beginning, of the certificate and diploma courses, with different qualifications for admission to each. There were 359 applications for admission to the College, 252 for the certificate course and 107 for the new diploma course. For the certificate course 39 were offered admission but only 26 joined. This falling off is undoubtedly due to the fact that this course has lost much of its popularity, now that normally it can only lead to the lower division of the subordinate agricultural service. For the diploma course 28 were offered admission and 18 actually joined. It was found in practice necessary to grant stipends to all. Those who originally came without stipends left the College. Forty-five students appeared for the certificate examination, of whom 37 passed ; while 13 appeared for the diploma examination and all passed, one being placed in the first class. Preliminaries for the affiliation of the Agricultural College to the University of Madras were worked out during the year and formal application has since been made to the University for the treatment of agriculture as a new department of science in the existing Faculty of Arts and Sciences and for the institution of a new degree to be known as B.Sc.Ag.

Agricultural research and experiments

131. The season was marked by a failure of the south-west monsoon in the Circars and the Ceded districts, which resulted in the poor yield of all crops and the total failure of many of the grain crops, and by a very heavy north-east monsoon in November in the south, which damaged the standing crops of paddy and groundnuts. The season in the cotton tracts of south and on the west coast was, however, generally favourable. Varietal, cultural and manurial tests in sugarcane were carried out at several stations. At Coimbatore Coim. No. 1, referred to in last year's report, gave the best jaggery but only a moderate yield. The last three years' experiments in planting canes in pits have conclusively proved that the system of planting in furrows is the best. Trials with fish guano as against castor cake at Samalkota showed that the former could replace the latter at equal prices. The Economic Botanist continued his work of producing improved types of paddy. His strains Nos. 24, 76, 91, and 1303 were becoming increasingly popular in those tracts for which each was intended. He evolved strains which were an improvement on those mentioned above, and these were being multiplied with a view to their distribution. A certain amount of selection work was also carried out. Manurial experiments were continued. The general results indicate that nitrogen and phosphorus increase the yield, the latter especially the yield of straw ; that potash has, if anything, a depressing effect ; and that there is a considerable residual effect from phosphatic manures. Experiments with the "Tanjore manure mixture," prescribed for trial in the Cauvery delta, have definitely proved its value at the Manganallur Agricultural Station. Research on cotton came during the year under the control of the Cotton Specialist and most of his work was done on the Cambodia crops grown on the Central Farm at Coimbatore. The selected strains, N. 14 of Northerns and H. 25 of Westerns, which are now being given to ryots on a large scale, are proving to be a practical success. Both these cottons sold at considerably higher prices than the local cotton in the tracts concerned. In the VI Circle, the work of cotton selection continued and the various comparative tests carried out showed that some of the new selections were distinctly better yielders than the standard types, Company Nos. 2 and 3, which were being given out to ryots. The failure of the season rains in Bellary prevented any results being obtained from trials of different varieties of cholam (*Sorghum vulgare*). The comparative tests of wide and narrow drilling of selections of cholam at Nandyal were tending to show that wider drilling gives the better yield. This confirms the results previously obtained at Coimbatore. In an experiment at Coimbatore it was found that nitrolim as a manure had no effect on a crop of dry tenai (Italian millet) and very little effect on a crop of irrigated ragi. Type No. 8 ragi did very well at Coimbatore. The results of the experiments on rotation of groundnut and cereals at the Pālūr station showed that a mixed crop of a cereal, interplanted with groundnut, gives a better money return than a pure rotation ; that it is best to change the cereal rather than to repeat the same cereal each year ; and that of the cereals tried, cumbu does better than tenai for mixing with groundnut. Unlike the experience of the Central Provinces, sulphur, in whatever form used as a manure, had no noticeable effect on groundnut. Some of the two or three year old coconut plants on the west coast stations showed remarkably good growth and the local practice of planting coconuts in deep pits, sunk well below ground level, appeared to be unnecessary. The advantages of inter-cultivation continued to be well-marked at the Kāsaragōd station. A copra dryer was installed for future investigation into the correlations existing between harvesting time, size of nut, and oil content. A beginning was also made in the investigation of the sugar producing qualities of coconut. The yield of pepper at Taliparamba was only moderate, the season being unfavourable to the setting of fruit ; the Kalluvalli variety, however, continued to give the best yield. At the Nanjanad farm, the value of fish manure for the potato crop was established. The growing and ploughing in of

Sugarcane

Paddy

Cotton

Dry grains

Groundnut

Coconuts

Miscellaneous crops

mustard as a green manure crop was found to have a marked effect on the succeeding potato crop. Tapioca grown at Pālūr gave a profit of Rs. 178 per acre. The distribution of this useful food crop in the Presidency being very uneven, there is room for considerable expansion. As to fodder crops, 2·20 acres under guinea grass, cultivated intensively at Coimbatore, yielded 82,650 lb. of green fodder. Scarcity of fodder having been reported in the Ceded districts, a small but successful demonstration of feeding cattle with prickly-pear was carried out in Bellary. Breeding bulls were maintained at seven stations for service on payment of the prescribed fees. Work on live-stock was, however, concentrated on the improvement of the Ongole breed of cattle by the production of a number of good breeding bulls in the farm at Chintaladevi, the improvement of the milking qualities of the country buffaloes at the buffalo-breeding station at Samalkota and the improvement of the Madras milk supply. In regard to the last, attempts were made to produce a type of dairy animal by grading up indigenous cattle with Ayrshire stock and to improve the economic position of the dairy men. The simultaneous method of inoculation against rinderpest tried for the first time with the Agricultural College herd showed that this disease need not act as a serious deterrent to future progress.

Live-stock

Scientific research and experiments

132. In the chemistry section, 441 analyses of soils, manures, etc., were carried out in addition to sugar analyses. The final maps and tabular statements of the Gōdāvari soil survey were under preparation. The analysis of soils in connexion with the Periyar soil survey was continued but not completed. Towards the close of the year, the soil survey of Malabar was taken up. Composting experiments with Trichinopoly phosphates and green manures were continued both in the laboratory and in the potculture house. The results obtained so far from work on the constitution of the various parts of the coconut plant indicate that the ash of the bearing tree contains more potash and less lime and phosphoric acid than that of a barren tree. Other investigations were also in progress. The Cotton Specialist worked out a method by which it is only necessary to measure five seeds per plant in order to arrive at an accurate figure indicating the average length of lint. The Economic Botanist continued to work on paddy on the same lines as before, that is to say, selection, multiplication and testing of pure strains of paddy, and the cross-fertilization of various strains in order to study the inheritance and linkage of the various characters of the paddy plant. With a view to enabling him to carry on detailed tests in one of the main paddy—growing tracts, the Government sanctioned during the year the opening of a sub-station in the Cauvery delta. The study of South Indian grasses was continued by the Lecturing and Systematic Botanist and collections were made in the grazing areas of Chingleput and Vizagapatam. During the year some 280 specimens were collected, 1,200 identified and 1,682 sheets added to the Herbarium, bringing the total number of sheets to more than 16,000. There were signs that ryots were taking more interest in matters entomological, and inquiries from all parts of the Presidency to the Entomologist were more numerous than in the previous year. Research work in the Entomological section was mainly devoted to the two important cotton pests, viz., the pink boll worm and the stem weevil. Records kept showed that the percentages of both infested bolls and of boll-worms increase steadily and rapidly from April onwards till the end of July and that the infestation in areas where the Pest Act was enforced in previous years was not so bad as in tracts which had not been brought under it. Two natural enemies to the stem weevil were also discovered. Investigations into various paddy pests were carried out throughout the year, in particular with reference to the disease known as *Yerra tegelu*. Vigorous campaigns were organized against the swarming caterpillar (*podoptera*) in Malabar and the *hispa beetle* in South Kanara. During the year, the Sericultural Expert took independent charge of the Sericultural section, which was hitherto attached to the Entomological section. Endeavours made during the year to improve the breed of worms failed, but a

Chemistry

Botany

Entomology

Sericulture

successful demonstration of the value of care in handling worms was carried out. Rearers were instructed in regard to the number of feeds to be given, the interval to be allowed between feeds, the spacing of the worms, the ventilation necessary, and the cleaning of litter, with the result that the yield of green cocoons increased by 30 per cent. A method of cleaning waste silk is being taught to reelers which is likely to fetch a higher price for the waste. The possibility of utilizing chrysalides in the production of oil for soap-making was being tested. The Mycological section supplied scientific advice on which palm-disease operations were undertaken in the Gōdāvari, Kistna and Guntūr districts. It also took steps to see that the young fruit trees imported from Australia for the pomological station at Coonoor were free from disease. The spraying of grape vines against mildew at Michaelpatti in the Madura district was attended with marked success. The ryots were found to be more willing to pay for the cost of spraying : and four of them bought spraying machines for themselves. Research was continued on the various fungi causing damage to casuarina plantations. Work at the sugarcane-breeding station was, as usual, confined to breeding thin canes suitable for North Indian conditions for which purpose the station was primarily started. The Sugarcane Expert worked out a method by which sugarcane pollen can be kept alive for as many as eleven days and this had enabled crosses to be carried out between varieties which flower at different times or at different places. Five new strains obtained from crosses during the year were declared suitable for trial in North India. The Bacteriological section was instituted in January 1921 and, in spite of the limited laboratory accommodation available, the biologic analysis of the soils on the College estate was commenced and an inquiry started into the cause of the premature fall of cotton bolls.

Mycology

Sugarcane-breeding station

Bacteriology

133. The Pest Act was extended during the year to the operations against palmyra bud-rot in the Gōdāvari and Kistna districts and in parts of the Guntūr district under a staff in charge of a Special Deputy Collector co-operating with the Government Mycologist. An extensive propaganda was carried out to educate both ryots and village officers in their duties under the Act. It is gratifying to note that the provisions of the Act were carried out almost entirely by peaceful persuasion, only one prosecution being found necessary. The beneficial results of the application of the Act to Cambodia cotton in the Coimbatore district in 1919 were reflected in the high price which it commanded in the market in 1920. In the 1920 season the Act was further extended to certain areas growing the same species of cotton in the Salem, Trichinopoly and Madura districts, with the most satisfactory result that the 1921 crop is now in very good condition. It was also enforced in respect of the water hyacinth in the Gōdāvari district and Trichinopoly taluk. Illustrated vernacular leaflets describing the plant were prepared and issued. The Mahali disease of areca palms continued to diminish and several sprayers were sold to garden owners. The anti-smut campaign was continued in the Kurnool and Bellary districts. Over 257,000 setts of improved varieties of sugarcane were distributed to ryots in the I and IV Circles and the use of the "Sindewahi," the latest type of improved furnace for making jaggery, was successfully demonstrated at various centres. Over 100,000 lb. of Cambodia cotton seed were sold for seed purposes in those parts of the Presidency where this crop was grown, while 330,000 lb. of Nandyal-14, 131,000 lb. of Hagari-25 and 27,000 lb. of "Company" cotton seed were sold in the "Northerns," "Westerns" and "Tinnevelly" cotton tracts, respectively. The number of seed unions increased from six to twelve during the year, but only six really functioned. These were responsible for the distribution of large quantities of seed in the Tinnevelly tract. More than 128,000 lb. of paddy seed of different strains and varieties were distributed during the year. The practice of growing green manure crops was becoming common in many parts of the country where hitherto it was unknown. The use of bone-meal in conjunction

Aid to the public

Operations against disease

Crops

with a green crop, as manure for paddy, was coming into favour in the I Circle. About 134 tons of the "Tanjore manure mixture" were sold in the V Circle and 36 tons of oil-cake in the IV Circle.

Agricultural associations, shows and fairs

134. No cattle or pony show was held at Tiruppūr during the year owing mainly to the prevalence of rinderpest and plague. The usual poultry shows were held, one at Ootacamund in May 1920 and another in Madras in January 1921. Agricultural demonstrations and exhibitions were also held during the year at 6 centres. There were in all 31 demonstrations of agricultural implements in the II and III Circles. The Co-operative societies and unions in the Gōdāvari, North Arcot, Salem, Malabar, and South Kanara districts actively collaborated with the department in the purchase and sale of manures, manure seeds and agricultural implements.

Finance

135. In the absence of final accounts for March, the receipts and expenditure worked out to Rs. 3·86 lakhs and Rs. 12·71 lakhs as against Rs. 3·33 lakhs and Rs. 13·80 lakhs, respectively, in the previous year.

Civil Veterinary Department

136. During the year there were two additions to the staff in the Imperial cadre. The number of Deputy Superintendents remained the same as in the previous year. The strength of the subordinate establishment, as it stood on the 31st March 1921, was 16 Inspectors and 138 assistants as against 15 Inspectors and 121 assistants on the 31st March 1920. Eighteen new graduates were entertained during the year and an Inspector's range was newly created. The number of dispensaries newly opened was six. Admissions fell in sixteen institutions, but 19 showed an appreciable increase over the previous year's figures; Trichinopoly stood first among the latter, the number of admissions being 2,252 excluding castrations. The total number of castrations performed at all the institutions excluding the Veterinary College Hospital increased, by 402, to 2,648. There was a satisfactory fall (from 5,825 to 5,261) in the number of cases in which medicine was supplied without personal inspection. The year was a comparatively healthy one for the cattle of the Presidency. The total number of deaths from contagious diseases stood at 37,066, which is the lowest on record for the last 20 years. The decrease occurred under every head of disease. Rinderpest which usually claimed the largest toll accounted for 17,273 deaths as compared with 31,237 in 1919–20, 44,164 in 1918–19 and 30,733 in the year previous. The number of non-contagious cases treated showed an increase, indicating the growing appreciation by the people of the opportunities of veterinary relief afforded by the department. Village officers continued, however, to be slack in reporting outbreaks of contagious diseases among cattle. The total number of students on the rolls of the Veterinary College on the 31st March 1921 was 94. The college continued to do very satisfactory work and good results were shown at the professional examinations held in March 1921. The total receipts and charges of the department were Rs. 0·24 lakh and Rs. 3·47 lakhs respectively.

WEATHER AND CROPS

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Season and Crop Report for fasli 1330; Agricultural Statistics of India; Estimates of Area and Yield of principal Crops in India*]

Rainfall

137. The south-west monsoon commenced, as usual, early in June with heavy rains on the West Coast and moderate showers on the Hills which continued with slightly varying strength up to the end of August when it weakened on the West Coast but was on the whole seasonable and quite up to the normal. In the south of the Presidency the rainfall in June was about normal, but elsewhere it was neither plentiful nor well-distributed. The rains during July were generally light and disappointing, particularly in the Deccan and in the greater part of the Circars, the

Carnatic and the Central districts with the result that sowings of wet and dry crops were retarded and the dry crops already sown began to feel the effects of the drought in the Deccan and in parts of the Circars. In the earlier half of August the rainfall, though light, was fairly general and good showers towards its close eased the situation to some extent. The monsoon took a more favourable turn in September in the majority of districts and largely made up the deficiency in the area under cultivation, facilitated transplantation and rendered prospects more hopeful. On the whole, the total rainfall outside the Southern districts was below normal and the deficiency which was particularly marked in the Circars and the Deccan was generally reflected in the area under cultivation. The rains in the earlier half of October, the opening month of the north-east monsoon, slightly improved the outlook in the Circars and the Deccan. Fairly good showers fell elsewhere towards the close of the month, and the rains of November were particularly heavy in the Carnatic, the Central and the Southern districts. But the rains failed to reach the northern half of the Circars and the Deccan, where the crops either failed or yielded a poor outturn in parts. The rains held off thereafter, but the total fall during the north-east monsoon exceeded or was about the average in Gōdāvari, Carnatic, the Central districts, the South and Malabar and led to an increase in the area under cultivation in many districts. In the latter half of January there were heavy rains in the South and in parts of the Central districts and fairly good showers in the Circars which proved beneficial to the standing crops in Vizagapatam, Chingleput and North Arcot ; but heavy floods affected the outturn of crops in Trichinopoly. Fine weather lasted up to the middle of April, when it changed bringing light showers which continued with varying strength up to the end of May.

Crops

138. The season on the whole was favourable to agricultural operations except in parts of Ganjām, Vizagapatam, Kurnool, Bellary and Anantapur, where both the monsoons proved disappointing. Relief operations under the Famine Code were accordingly started in Ganjām, but the test works opened there did not reveal the existence of distress and were accordingly closed. In Kurnool, the distress which was confined to a portion of a taluk did not pass the stage of test. In Anantapur and Bellary, the distress was more severe and widespread covering an area of 2,246 square miles : and these tracts after being kept under observation for sometime were declared famine areas. For want of timely and adequate rains and on account of the insufficient supply of water in the irrigation sources in parts of Vizagapatam, Kistna and in the Hosūr taluk of the Salem district and as a result of the submersion of paddy crops in the Trichinopoly, Udāiyarpālaiyam and Kulittalai taluks of the Trichinopoly district, seasonal remissions on a somewhat large scale were granted. Owing to general failure of crops, remission of dry assessment amounting to Rs. 11,500 was granted in the red soil tract of the Rayadrug taluk of the Bellary district and postponement of the collection of kists beyond the fasli was also found necessary on a somewhat large scale in the affected tracts of Kurnool, Bellary and Anantapur districts and in a few villages of the Palnād taluk of the Guntūr district. The area under cultivation in the Presidency fell short of the normal by 3·6 per cent. The extents under paddy, cumbu, gingelly, castors, sugarcane, cotton, indigo and tobacco showed a decrease and those under cholam, ragi and groundnut an increase. The outturn was generally below the normal.

HORTICULTURE (1920-21)

[*Report on Government Botanic Gardens and Parks, the Nilgiris ; Report of the Agri-Horticultural Society of Madras ; and Report on the Government Cinchona Department, Madras*]

Government Botanic Gardens and Parks, the Nilgiris

139. The season and rainfall was on the whole favourable to the growth of plants. In the Government Botanic Gardens, the Conservatory presented a very beautiful sight towards the end of the year, when an unusually fine collection of Cinerarias and Primulas were in bloom. The Fern house, though not so popular as the Conservatory, was constantly visited by the general public, the chief attraction being the tropical orchids. The nurseries were cleared of a noxious weed and replanted. Some new plants were obtained from the Department of Agriculture, United States of America, for experimental cultivation. The Arctotis, newly planted, has proved a valuable addition with its flowers of a beautiful orange colour and the honey-suckle, Lonicera, which is an object of admiration, is in great demand. With the exception of *Ipecacuanha*, the medicinal plants previously cultivated were not much of a success and certain new plants were expected from Kew for purposes of trial. The Government Parks were somewhat difficult to maintain, being scattered in a number of places throughout Ootacamund. The Sim's Park at Coonoor lost none of its popularity and continued to attract visitors always. Though the Burliar Experimental Garden was more frequently visited than before, the demand for seedlings kept in stock there continued to be poor. The Kallar Experimental Garden, though well stocked with plants and seedlings for grafting purposes, remained unfrequented on account of its locality. The fruit trees were growing well, especially the mangoes. The orange trees produced a fair crop. The climate of Kallar is such that oranges get little or no rest. These trees were given an enforced rest by root-pruning and other methods. The receipts in all amounted to Rs. 6,957 and the expenditure to Rs. 43,304.

The Agri-Horticultural Society, Madras (1920-21)

140. In the Agri-Horticultural Society's garden at Madras, the supply of botanical specimens to students and visitors and of class material to the local colleges and schools was continued as in the previous year. As usual, several thousands of seedlings of annuals were raised and distributed among members and sold to non-members. The *Rosarium* in the Nursery Gardens was replanted and also extended to meet the increasing demand for roses, it being the only place in Madras from which roses can be obtained after the end of February. Grewia Asiatica and two varieties of Ficus Carica, planted in 1916, have come into fruit : but the size of the fruit is small. Flower and foliage beds continued to be maintained in the Ornamental Gardens. Great difficulty was, however, experienced in filling the flower beds with annuals in the summer : and perennials were introduced in their place with considerable success. The income of the Society from all sources excluding the Government grants was Rs. 11,733 or Rs. 2,896 less than in the previous year. The decrease was largely due to non-realization before the 31st March 1921 of a portion of the year's earnings. The Government grants amounted to Rs. 6,300 as against Rs. 7,000 in the previous year. The eighty-second annual exhibition of flowers, vegetables and fruit was held in the Nursery Gardens of the Society in January 1921. In conjunction with it, the fourth All-India Poultry Show was also held.

Government cinchona plantations

141. The Government Cinchona Department recorded another year of successful work. At the beginning of the year there were in all 1,590 acres of cinchona on the plantations. Trees which had grown but indifferently and those which were diseased were uprooted in an area of 19 acres during the year, leaving at its end an area of 1,571 acres under cultivation. There were no new extensions and opportunity was taken to revalue the plantations. It has been the policy to rely in a great measure on purchases of cinchona bark from local planters for the production of quinine and to look on the bark of the Government plantations as a reserve against an

emergency. Accordingly in the past twenty years large purchases of cinchona bark were being made from private growers, but with the exception of the Oosamalai plantation on the Anamalais no attempt worthy of note has been made in recent years to extend the cultivation of the cinchona tree. Supplies of bark that can be looked for from private sources in the immediate future, are almost negligible and in a year or so, a considerable area of the plantations will require to be cut down to furnish the necessary raw material for the quinine factory. Every acre of the Government plantation, which held out any prospect of success, has been planted with cinchona trees and no further extension of activity is possible in the vicinity of the plantation. Pending a decision as to the future policy, attention is being concentrated on cultivation so that by harvesting time the maximum alkaloidal content may be obtained from the bark. The old quinine factory having been destroyed by fire in 1919, a new one has been reconstructed on modern lines with good lighting and ventilation. The quantity of bark allowing for wastage placed to the factory account during the year was 842,293 lb. of the value of Rs. 3·09 lakhs. From this 26,253 lb. of quinine were obtained. The estimated value of the bark obtained from the Government plantations, viz., 45,350 lb., was Rs. 5,669. The cost of extraction was Rs. 4·3 per lb. of quinine against Rs. 4·7 in the previous year. The high market price of quinine has driven many people to become acquainted with the virtues of cinchona febrifuge and during the year nearly 13,000 lb. were disposed of—a record sale since the manufacture of quinine was undertaken. A very great demand has arisen for it particularly from Indian patent medicine makers and special arrangements are being made to increase the output of this substance. It comes too of great interest to learn from Major Acton, I.M.S., that the administration of cinchona febrifuge in benign tertian infections (which account generally speaking for about 50 per cent of the cases characterised as "malaria") is better than quinine. Should this finding be upheld by the experience of other members of the medical profession, then the difficulty of obtaining land to produce bark for cinchona febrifuge can easily be solved. While *Cinchona Ledgeriana* from which quinine is obtained requires optimum conditions of soil and drainage for successful growth, the species which will readily yield cinchona febrifuge, namely, *Cinchona Succirubra*, can be cultivated with ease in South India. Further as there is practically speaking no market for this bark in England, large quantities are available for purchase locally. During the year 5,310 lb. of cinchona febrifuge were made in the factory — a welcome addition to the stock of a substance in great demand. The output of quinine sulphate increased from 16,054 lb. to 24,576 lb. In all 42,784 lb. of factory products were issued from stock in the year, which comprised 28,711 lb. of sulphate of quinine, 1,120 lb. of quinine hydrochloride, 6 lb. of quinine sulphate tablets, and 12,947 lb. of cinchona febrifuge. In addition to the above 9,800 lb. of quinine sulphate belonging to the Government of India were disposed of. The receipts of the year, excluding the money value (Rs. 3·23 lakhs) of the sales from the Government of India stock, amounted to Rs. 9·92 lakhs and the total expenditure to Rs. 3·12 lakhs.

FISHERIES

(1st July 1920 to 30th June 1921)

[*Report of the Department of Fisheries; G.O. No. 2142, Development, dated the 17th November 1921*]

142. During year the Director was deputed to study fishery conditions in Norway and Denmark and the work engaged him for over two months. The results of the study were embodied in a separate report and the most important conclusion was the impression gained of the suitability of the Danish seine for introduction in Indian waters; the Government

General

have since agreed to a trial being made in this Presidency with this appliance. The Director also drew up a comprehensive guide dealing with the common shell-fish of South India so as to serve as a companion hand-book to the collections of shells intended for supply to secondary schools. In addition, a report on the "Outrigger Fishing-canoes of Indonesia" was published by him. Though some of the semi-commercial concerns controlled by the department were worked at a profit, the results of the year were on the whole not very encouraging. The total receipts of the department from all sources amounted to Rs. 2·29 lakhs and the expenditure to Rs. 2·93 lakhs.

Marine work

143. The Industrial section suffered frome xceptionally unfavourable conditions, both natural and economic. The catches of sardine on the

Canning

west coast were a complete failure; the scarcity was so great that out of 646 private and guano factories 356 did no work whatever and the operations of the rest did not go beyond a couple of weeks' work during the year. Mackerel, on the other hand, were abundant and the bulk of the goods canned were of this fish for which unfortunately the demand was small as compared with sardines. To add to the difficulties, the price of tin-plate rose to an extravagant height and this proved a serious handicap as it involved an increase in the rates charged for canned goods. The experimental cannery at Chaliyam was peculiarly affected by the fact that the local demand for its products was largely a war demand and it was unprepared with any selling agency sufficient to meet changed conditions. Proposals are pending for the removal of the cannery to a better locality, where sardines are either more naturally abundant or the fisher-

Curing

man more numerous and energetic. The year proved even worse than its predecessor for the experimental operations carried on at Tānūr in the curing of fish and the production of fish-oil and guano. Had it not been for mackerel, the operations would have been trivial. As it was, 97,724 lb. of fish, chiefly mackerel, were purchased for curing and the improved cures found a greater market; this development is gratifying as it is one that has long been sought. The demand for smoked fish, semi-dried prawns and fish-meal for poultry steadily increased. Oil and guano operations were restricted owing to the dearth of sardines but, though small, they were highly remunerative. The total output of guano was 1,500 tons as against 24,000 tons manufactured in the previous season. The demand for oil was very limited and inquiries showed that Malabar fish-oil had on account of its adulteration earned a very bad reputation. The department was making efforts to bring the manufacturers to a sense of the injury they cause to the entire industry by their lack of commercial morality. Public fish-curing yards under the management of the department numbered eight or one more than in 1919–20 and the operations carried on therein showed a remarkable increase, due mainly to the phenominal catches of mackerel at Malpe. At Tānūr and Cannanore the Moppilla curers, largely from political motives, refused to carry out certain inexpensive improvements to their cadjan sheds and went on strike. The men at Tānūr were, however, eventually persuaded to resume work. The results of the experiments known as the inshore fishing experiments in Madras conducted during the last three years proved to be unsatisfactory; they failed to demonstrate the utility of Malabar canoes and boats in obtaining larger catches of fish near Madras or elsewhere on the east coast.

Oyster supply

The year's operations in oyster supply were the most satisfactory on record. The number of oysters sold totalled 167,000 as against 133,450 in 1919–20 and the condition of the Pulicat farm was financially sound. The results of certain experiments conducted showed that healthy layings of oyster could be made in special enclosures close to the bar at Ennore. The decline

Chank fishery

in chank fishery which commenced in 1919–20 continued. The number of shells fished again fell from 339,835 to 283,869 and the net profits from Rs. 0·46 lakh to Rs. 0·37 lakh. This falling off in profits is perhaps attributable to the much smaller number of shells fished, caused it is believed by the comparative exhaustion of the chank beds and failure to find others equally good and also the constant difficulty experienced in obtaining a sufficient

number of divers. The latter difficulty has since been met. The Beche-de-mer fishery which is an adjunct carried on mainly to bring the wages of the Tirupalakudi chank divers to a remunerative level proved an entire failure.

144. Operations connected with the acquisition of fresh tanks and stocking them with fish continued to advance during the year and the number of tanks taken over by the department increased by 135. A scheme for the acquisition of fishing rights in the principal tanks and streams in the Ganjām district was also under preparation. The fish-farms established in the Presidency continued to provide large supplies for stocking purposes. Gourami and *Etroplus Suratensis* bred prolifically and the wide distribution of the latter to inland waters should soon make it well known in places where none existed a couple of years ago. The use of the fry of certain species of *mullet*, begun in 1919-20, was largely extended. Larvicides came also to be freely employed. Considerable progress was made in the study of the early stages of *Hilsa*, the nesting habits of Gourami and the breeding habits of two of the largest catfishes found in the Cauvery (*maerones aor* and *M. Seenghala*). The fish-farm at Mopad was nearing completion. **Inland fisheries**

145. The supply of Zoological specimens for teaching and exhibition purposes continued to be successfully performed and the Marine Aquarium maintained its claim to be among the foremost popular resorts in Madras City. The number of fishermen's co-operative societies rose from 47 to 69 and the membership from 2,827 to 3,544. Most of these societies worked satisfactorily, making due allowance for the inexperience and illiteracy of the great majority of the members. The Government Fisheries Training Institute at Calicut continued to make progress and 24 pupil-teachers were under training. The number of village schools for fisherfolk rose from 20 to 28, of which 15 were day and 13 were night schools. The number of pupils increased from 929 to 1,385, of which 285 were girls. **Miscellaneous**

FORESTS *

(FASLI 1330—1ST JULY 1920 TO 31ST MARCH 1921)

[*Report on the administration of the Forest Department for nine months ending the 31st March 1921; Statistics of British India, Vol. II, Financial Statistics, Part II, Forests*]

146. Apart from malaria and other risks to health which are unfortunately a normal incident in the life of forest officers and subordinates, the year witnessed administrative difficulties of a graver aspect. Stimulated by the general unrest and by the preaching of non-co-operation, the attitude of villages in some parts of the Presidency has become increasingly antagonistic to the Forest Department : and the difficulties of forest conservancy have been accentuated. Complaints have not been confined to cases of ill-treatment, injustice and hardships or what appears to the villagers to be such : but have extended to the existence of forest reserves, and demands have been made for wholesale disafforestation and surrender of control of forests to the villagers themselves. Most of the villagers' demands are destructive of the permanence of forests and the rules in force cannot in many cases be relaxed without injury to the permanent interests of the country. The generality of the public are unaware of the almost complete destruction of forests on waste land during the last twenty years, the rapid degradation of private forests, and the results which have always followed the removal of restrictions. Though the ideal to be aimed at is the surrender of all **General**

* The previous report was for the forest year ending 30th June 1920. As the Government have directed the compilation of reports for the financial year, the report under review was drawn up for the period of nine months from 1st July 1920 to 31st March 1921. Comparisons of statistics are not therefore of much value.

forests on which the villager depends for his daily wants to the management of the village itself, such a surrender must be accompanied by some guarantee that the forests are not destroyed by the selfishness of the people. Public opinion is yet far from grasping the many difficulties of the case. The results of general protection during the nine months under report were, as may be imagined, more unsatisfactory than usual and a regrettable feature was the increase of assaults on isolated and unprotected forest subordinates. The department, as a whole, continued to work satisfactorily notwithstanding conditions which were often very discouraging. The outstanding feature of the forest administration during the year was the creation of two additional circles with headquarters at Bellary and Ootacamund. Orders were received from the Government of India in the course of the year on the recommendations of the Public Services Commission in regard to the Imperial Forest Service. The cadre of that service has now been raised from 43 to 61, including 7 posts of Extra Deputy Conservators which were transferred to it. The Provincial Forest Service will in future be designated the Madras Forest Service.

Area

147. During the period under review, the area of reserved forests rose from 18,794 to 18,825 square miles, while the extent of reserved lands fell from 565 to 500 square miles. The important changes were that out of the reserved lands 60 square miles were finally constituted reserved forests, and about 5 square miles were adjusted in rectification of boundaries consequent on survey. As for reserved forests, 5 square miles were disafforested to provide for the extension of cultivation and for the removal of forest boundaries from the close proximity of villages. About 16 square miles of reserved forests in Tanjore were transferred to the control of the Revenue Department, since it was not found convenient to add this small forest area to any other forest division.

Forest settlement

Settlement operations were proceeding in respect of a further extent of 474 square miles. Arrangements were made for the reservation of 37 square miles of hill forest in the Atur taluk of the Salem district in the interests of sandalwood growth and for the protection of water sources. About 80 miles of forest boundaries were demarcated during the year chiefly in the districts of Upper Gōdāvari, Kollegal, Central Coimbatore and North Malabar.

Demarcation

Four hundred and eighty miles remained to be demarcated at the close of the year chiefly in the districts of Kollegal (183 miles) and North Coimbatore (101 miles). The work of final demarcation in this part of the Presidency had for some time been neglected partly for want of funds and partly for want of staff : and the question was engaging the attention of the Conservator of Forests, V Circle. The length of old boundaries repaired was 20,077 miles against 20,431 miles in the previous year. The responsibilities of the department for the maintenance of forest boundaries may be appreciated when it is realized that the latter reach a length of 21,000 linear miles equivalent nearly to the mean circumference of the earth.

Survey

The Survey of India Party continued operations in the Guntūr and Nellore districts and surveyed 635 square miles on the 2-inch scale and 64 square miles on the 1-inch scale. In South Coimbatore, the lower Anaimalai slopes in the Udamalpet range were surveyed on the 1-inch scale.

Working plans

Working plans covering an extent of 121 square miles were sanctioned against 73 square miles in the previous year. The management of nearly all state forests under working is subject to a working plan : but many of these plans are so obsolete and defective that they have been discarded in favour of temporary schemes applicable to that part of the forest actually under treatment until such time as the whole working plan can be recast. Two important working plans for the Nilambūr valley and Goomsur forests were prepared and they are now in the press.

Communications and buildings

148. Two hundred and twenty-four miles of new roads were constructed at a cost of Rs. 2·25 lakhs, and 1,180 miles were repaired at a cost of Rs. 0·69 lakh. The scheme of road development on the Javadi hills was pushed on : and Rs. 0·87 lakh and Rs. 0·49 lakh were spent on the Amerdi-Nadanur road and on the Komattiyeri-Patrakad road, respectively. In

connexion with the exploitation of the Chenat Nayar forests the construction of the road from Olavakode railway station to the foot of the hill forest and the continuation of this road from the Dhoni depot to the forest station on the Sappal ridge were undertaken, but were not quite completed by the end of the year ; Rs. 36,984 and Rs. 9,809, respectively, were spent on these two works. The Government have sanctioned after the close of the year the construction of the first six miles of the Mount Stuart Ghat road at a cost of about Rs. 2·02 lakhs. The bullock tramway at Mount Stuart by levelling down the track on each side of the metals and by the clearance of overhanging growth was put into much better working order. Considerable progress was made with the construction of the saw-mill buildings at Russellkonda. Miscellaneous building works such as inspection bungalows, range offices, rangers' quarters and subordinate lines were carried out in various parts of the Presidency. A sum of Rs. 11,000 was spent on the construction and repair of tanks and wells and on the improvement of water-supply in forests. The desirability of affording greater drinking water facilities in forest reserves was discussed in the Legislative Council meeting last year and, as a result, instructions were issued to District Forest Officers to take action wherever hardship exists in the matter of access to water and to desist from prosecuting individuals for trespass when cattle are driven into forests merely for watering.

Protection of forests

Offences

149. The total number of new cases was 23,947 against 27,537 in the previous year. Unauthorized felling, as usual, formed the largest head of forest crime in all the circles, the Fourth Circle contributing 33 per cent of the total. The grazing offences also increased proportionately, notably in the Third Circle which contributed 37 per cent of the total number of offences under the head. Seventy per cent of the cases that remained undetected related to offences connected with injury to forests by fire. Of 21,482 cases disposed of (including cases of the previous year), 6,121 were dealt with by magistrates, 14,032 compounded and 1,239 withdrawn. Of the cases disposed of by magistrates, 5,519 ended in conviction and 602 in acquittal. The percentage of failure in the cases brought to trial was 9·8. The average compensation fee realized per case was Rs. 12-12-11 as against Rs. 12-5-10 in the previous year.

Fire protection

The system of fire protection adopted in most districts continued to be the same as in the previous year, except in portions of the Nallamalais in Kurnool, Upper Gōdāvari, North Coimbatore and Kollegal where the scheme of early burning under departmental agency was tried. The trial was particularly successful in Upper Gōdāvari. It was also continued on a larger scale in the three Kurnool divisions and 1,308 square miles of forest were protected ; the results were satisfactory, a little less than 50 square miles only having been burnt. The question of fire protection continued to be as difficult as ever in the Cuddapah district and more especially in the Sēshāchalam hills. A conference of Revenue and Forest Officers discussed measures of reform and, as a result, one officer was placed on special duty to submit definite proposals. His recommendations are under consideration. The total area over which special protection was attempted covered 5,997 square miles and the results were on the whole more satisfactory than those of last year ; 415 square miles of forest so protected were burnt. Fires were particularly disastrous in Upper Gōdāvari, South and West Kurnool, Bellary, Anantapur, the three Cuddapahs, Madura, North Malabar and the Nilgiris.

Grazing

Twenty-three per cent of the total area of forests was closed to grazing either wholly (19 per cent) or for part of the year (4 per cent) against 19 per cent in the previous year. The increase in closed areas occurred chiefly in the districts of Nellore and Chittoor ; it was due in the former division to the closure of worked coupes attached to kanchas for part of the year and in the latter division to the closure of seventeen reserves in the Madanapalle range for four months of the hot weather. To the open area of nearly 14,900 square miles, permits were issued for the grazing of 2,018,083 animals yielding an incidence of 4·71 acres per animal

against 4·69 acres in the previous year. Some areas, which are shown as open, contain forests in which there is normally no grazing or which are inaccessible to cattle. It is not therefore surprising that the actual incidence in some forests is still very high. To check the excessive incidence and to reserve the available resources for the better class of cattle, enhanced rates of grazing fees were imposed in four more divisions, viz., South Vellore, Chittoor, Vizagapatam and South Kanara. Owing to drought, seventeen closed reserves covering an area of 29,109 acres were thrown open to grazing in the Bellary district. In Anantapur, all closed areas were thrown open to grazing except small extents under cultural operations. Similarly in Kurnool, closed areas were opened to grazing in Cumbum, Mārkāpur and Morricheruvu ranges. In some cases, these concessions were granted after the close of the year. In Nellore and Chingleput the kancha system of grazing was continued and is reported to have worked well, but it is very difficult to persuade villagers elsewhere to adopt the system. The grazing revenue realized was Rs. 8·17 lakhs against Rs. 8·53 lakhs in the previous year.

Sylviculture

150. The chief interest in the department's work centred in the teak forests at Mount Stuart, where the artificial reproduction of teak and other timber trees after clear felling is being steadily worked at. The problem with regard to teak may be said to be solved: but for sylvicultural reasons which forbid the restriction of planting operations entirely to one species, however valuable, the department is endeavouring to bring up plantations of *Terminalias*, rosewood, and other timber trees to form groups among the teak. Equally interesting and of great importance were the sylvicultural operations carried on in the Tinnevelly and Chenat Nayar evergreen forests where a large number of species have to be dealt with, the sylvicultural requirements of which from youth to maturity can only be ascertained by a course of close study extending over many years. Experimental work was conducted at Dhoni, Nilambūr, Nedungayam and in the neighbourhood of Parappa in South Mangalore. At Dhoni, the work consisted of nursery experiments on the germination of seed and growth of seedlings and of sowing the seed of various species in the forest under varying conditions. At Nilambūr and Nedungayam, experiments were conducted to ascertain whether the valuable evergreen species, *Hopea parviflora* and *Artocarpus hirsuta*, could be raised as an underwood to teak plantations partly with a view to improve the growth of teak and partly for the sake of having a commercially valuable industry. In South Mangalore, important experiments were continued with *Hopea parviflora* to ascertain the best method of inducing natural reproduction, of obtaining artificial production and of transplantation of seedlings at various ages. It is to this part of the country that one has to look for the formation, by natural means, of large forests of *Hopea* and the permanent supply of constructional sleeper timber on a large scale. Mr. S. W. Howard, Imperial Sylviculturist, visited the Presidency after the close of the year and offered valuable suggestions in regard to the lines on which research work should be carried on in this Presidency. The first bulletin of sylvicultural research was issued early this year giving details of the work done during 1920–21.

Exploitation
Timber

151. The output of timber during the period under review was 98,450 tons against 105,800 tons in the previous year, but as the figures relate to a period of only nine months and omit those of greatest activity the comparison is of no value. A somewhat interesting development was the supply of ebony logs for fittings in some of the new public buildings under construction at Delhi. Another innovation was the supply of logs of *Terminalia tomentosa* to Messrs. Howard Brothers and Company who are the agents for timber to the Government of India in London. The timber of this common tree has commanded a sale in London for cabinet work at very high prices and attempts are being made to develop the market. Mr. C. S. Martin, the Consulting Forest Engineer to the Government of India, visited the evergreen forests of Malabar and Tinnevelly and the teak plantations of Nilambur, and made valuable suggestions for

their exploitation. The output of fuel amounted to 21,988 tons. There was a slight increase in the price of fuel in some large towns due either to increased cost of transport and wages or to increased demand and short supplies or to both. The question of starting casuarina plantations in Rāmnād and Tinnevelly to meet the serious shortage of fuel in Madura and Tinnevelly towns was engaging the attention of the department. Fuel

In the auction sale held at Satyamangalam last December, 202 tons of sandalwood were sold for Rs. 3·25 lakhs, while in the sales held at Tiruppattūr and Vellore about the same time 216 tons were sold for Rs. 3·43 lakhs. The total average price secured was Rs. 1,593 per ton against Rs. 1,439 a ton in the preceding year. Sandalwood

The revenue from bamboos showed signs of declining and this decline is likely to be accentuated during the next few years owing to the dying back of the stock in very large areas. The periodical seeding accompanied by death of the parent plant, commenced some ten or twelve years ago in the Bombay forests, has been slowly spreading down the West Coast. It has now reached South Malabar and is occasioning not only loss of revenue but great practical difficulty in the matter of rafting timber to the sea coast. Similar phenomena have occurred in the Javadi and other neighbouring hills in Salem, etc., as well as in the Gōdāvari Agency tracts. The matter is one of considerable importance, as it has already put back for ten years the opportunity for developing the bamboo pulp industry on the West Coast and may render useless the proposed detailed investigations into the bamboo pulp question in Gōdāvari. The revenue for nine months under report was Rs. 2·64 lakhs as against Rs. 3·49 lakhs for the previous twelve months. Bamboos

The operations of the Military Department during the year resulted in the removal of 3,920 tons of baled hay, for which a sum of Rs. 7,840 was paid to the department. Hay

The question of the utilization of mohwa flowers for the distillation of power alcohol is engaging the attention of the Agency Commissioner. Mohwa flower

A keen demand for nux vomica has arisen of late owing to the demand for strychnine in the preparation of insecticides for use in agriculture, and it was found necessary to organize the collection of this hitherto neglected product. This item was accordingly separated from a number of other kinds of minor produce in the annual leases and the right to collect it was sold by auction in several divisions for a period of three years. The current leases are the first steps in the direction of establishing what is practically a new departure and considerable development is anticipated. It is hoped that at the close of the period of three years, when the leases will terminate, the department will be in possession of more or less complete knowledge of the yield of each locality and of the factors that influence the collection, data for which are almost entirely lacking at present. Nux vomica.

152. The number of elephants in charge of the department at the beginning of the year was 128, including 4 baggage elephants working in Kurnool and Gōdāvari. Twenty elephants were added by capture, 2 were born in captivity, 10 died and 15 were sold leaving a balance of 125 elephants of the total book value of Rs. 3·70 lakhs. The actual sale value is probably about Rs. 6 lakhs. A sum of Rs. 41,475 was realized by the sale of fifteen elephants in December last; most of them were less than five years old. There was considerable mortality among elephants in the South Coimbatore division, where eight animals died from attacks of internal parasites. The Superintendent, Civil Veterinary Department, made certain suggestions in regard to change of camping grounds and other remedies, which are now under consideration. A stud of 239 bullocks and buffaloes was also maintained during the year. Forty died and 82 were added by purchase to the stock, which stood at 281 with a book value of Rs. 18,642 at the end of the year. **Live stock**

153. The general standard of education attained at the college was satisfactory and, although no honours certificate was granted, only seven students failed to take the higher standard certificate. Out of the 28 students of the 1919-21 division, 17 earned the St. John Ambulance Certificate for proficiency in First-aid. The 1920-22 division began with 37 students on **Forest College, Coimbatore**

the rolls and the number was reduced to 34 before the close of the year. The cost of education has been rising steadily since the opening of the college. At present each student costs Rs. 7,213 for his two years' course. The discipline at the college and the conduct of the students were good.

Finance

154. The total gross revenue amounted to Rs. 46·16 lakhs and the expenditure under Conservancy, Works and Establishments to Rs. 34·28 lakhs. The net result was a surplus of Rs. 11·88 lakhs.

MINES (1920)

[*Review and returns relating to the working of the Indian Mines Act during the year 1920; Statistics of British India, Vol. I, Commercial Statistics—Mineral Production*]

Output

155. As in the previous year, mining operations were carried on only in the five districts of Anantapur, Kurnool, Nellore, Salem and Vizagapatam: and the minerals raised consisted of gold, manganese, magnesite, mica and barytes. The quantity of barytes raised fell from 232 to 213 tons and that of magnesite from 13,012 to 11,300 tons. The output of manganese and mica, however, increased, by 4,608 and 185 tons, to 7,386 and 587 tons, respectively. As in the previous year, only one of the three gold mines in the Presidency was at work during the year. From a total quantity of 8,800 tons of quartz mined during the year, 13,645 ounces (troy) of gold and 868 ounces (troy) of silver were extracted as against 11,018 and 753, respectively, in the previous year. There were no special diseases peculiar to miners in the five districts concerned.

General condition of the employees

156. Vizagapatam, Salem and Kurnool continued to be immune from epidemics. In the Nellore district, the coolies in one of the mines were subject to malaria and 60 per cent of the children had enlarged spleens. There were six fatal cases of cholera amongst the mining population of the district. Four cases of measles and 18 cases of smallpox occurred in Anantapur. The general health of the employees elsewhere continued to be good.

Wages

There was no change in the rates of wages paid to labourers in Anantapur. The rates of wages in Nellore remained the same in the case of men, but rose from 2 to 4 annas in the case of women and from 1 to 3 annas in the case of children. In Vizagapatam, the rates of wages were higher by 50 per cent than those paid in 1919.

Employment of women and children

The supply of labour was adequate where the mine owners were liberal. Neither women nor children were employed below ground in Anantapur and Salem. The steatite mines in Kurnool continued to employ women below ground. Both women and children were employed below ground in Vizagapatam and Nellore.

Accidents

One accident due to a misfire, resulting in the death of one man and serious injuries to five others, occurred in Nellore. There were no accidents in Vizagapatam, Anantapur, Kurnool and Salem.

MANUFACTURES (1920–21)

[*G.O. No. 622, Development, dated the 15th April 1921; Statement of Cotton and Jute Mills at work in the Madras Presidency during 1920–21; Report on the working of the Indian Factories Act during the year 1920 and Report of the Department of Industries for the year ending 31st March 1921; Statistics of British India, Volume I, Commercial Statistics*]

Cotton and jute mills (1920-21)

157. The number of cotton mills which worked in the Presidency during the year was 19 or 1 less than in the previous year, of which 4 were in the French Settlement of Pondicherry and 1 in the Cochin State. These had nearly 4,700 power looms and 507,100 spindles at work and gave employment to about 32,400 operatives. As in the previous year, there were three jute mills in the Northern Circars and they employed

about 2,500 operatives daily. All except one of these concerns were worked as Joint Stock Companies.

158. There were 127 sundry industries which were private concerns, but which did not come under the operation of the Factories Act. Of these, 60 were worked by mechanical power and 67 otherwise. The chief industries carried on by these private concerns were tanning and rope works. Among those worked by mechanical power were 14 oil mills, 4 rope works, 12 tile-manufacture and brick-making concerns, 7 rubber works and 9 timber mills : the other class included 31 tanneries, 15 rope works, 2 tile-manufacture and brick-making concerns, 6 cotton spinning and weaving establishments not classed as mills and 5 rubber works. Five concerns gave employment each to a daily average of more than 1,000 hands. Minor industries (1920)

159. The Department of Factories which had hitherto been under the direct control of the Board of Revenue was placed under the Commissioner of Labour, Madras, with effect from the 23rd February 1920. In July 1920 the Government appointed Sanitary Commissioners and Deputy Sanitary Commissioners in this Presidency as Inspectors of factories within their respective jurisdictions. Seventeen factories were removed from the register during the year and 45 new factories were added, bringing the total to 511. Three hundred and thirty-two factories were perennial and 179 were seasonal. The average daily number of operatives was 101,655 or 3,553 more than that of the previous year. Of the total number of operatives, 7,177 were employed in Government and Local Fund factories and the remainder in private factories : 26,490 were employed in cotton spinning and weaving mills and 2,514 in jute spinning and weaving mills. The demand for female and child labour was steadily increasing. The number of women employed was 17,523 and that of children (boys and girls) 8,254 showing increases of 1,074 and 305, respectively, over the numbers in the previous year. The system of certification of children as to age and physical fitness worked satisfactorily, the number of certificates issued during the year being 5,548. In addition to 911 inspections of registered factories, 76 unregistered factories were visited : and suggestions were given to the managers regarding the health and safety of the operatives. The health of the operatives was generally good. The arrangements made for giving medical aid to the operatives in the larger factories were continued. Factory managements were realizing the desirability and the benefit of providing house accommodation to their employees. During the year accommodation for housing operatives was provided by the management of nine additional factories and improvements to the existing accommodation were made in two other cases. Schools were established at sixteen factories for the education of the children of the operatives. Three were maintained by the municipalities concerned and the rest by the occupiers. The total average attendance was 2,315 forming 34 per cent of the total number of children working in those factories. The periodical limewashing was generally attended to and provision of water-supply was sufficiently maintained. The wages paid to labourers during the year were much higher than those paid in previous years, this being due mainly to the enhanced cost of living. On the other hand, the wages paid outside factories were in excess of those paid inside them. This may be attributed to the fact that employment is more irregular outside factories. Owing to labour unrest, 62 strikes occurred during the year, of which 35 were in factories in Madras City and 27 in the mufassal. The total strength of the factories thus affected was 43,126 and the number that went on strike 32,555. The strikes lasted for periods varying from 4 hours to 104 days. The chief causes of strikes were inadequate wages, questions regarding grain and over-time allowances, reinstatement of dismissed men and grant of holidays. In fifty cases the demands of strikers were acceded to and in twelve the strikes collapsed. Only one trivial fire occurred during the year with no loss or injury to any person. In 435 factories, the interval of half an hour's rest after every six hours' work was Factories (1920)

allowed ; forty-four worked on a system of shifts and six claimed exemption. Wherever shifts had been allowed, precautions were taken to see that sufficient light was provided, that women did not work beyond the statutory period allowed, that children were not employed and that the orders of the Inspector regarding fencing and guarding of dangerous parts of machinery were promptly carried out. In 25 factories reductions in the working hours varying from 2 hours to 10 minutes per day were made. The number of accidents was 744 showing an increase of 88 over the number of last year. The number of fatal and serious accidents was, however, only 6 and 5 or one less in each case than in the previous year. The accidents were mostly due to the carelessness of the operatives and their inability to recognize the necessity of exercising precaution. Proceedings were instituted against occupiers and managers of 20 factories involving 32 persons. Of these 29 were convicted.

Department of Industries (1920-21)

General

160. The year was one of experiment in administrative organization and the Presidency was divided into five divisions with headquarters at Bezwada, Bellary, Coimbatore, Madura and Madras, respectively, with an Assistant Director in charge of each. A large portion of the time of Assistant Directors was absorbed in superintending pumping and boring operations, in the erection and maintenance of industrial installations and also in exercising general administrative control over the weaving parties. They were also employed in carrying out a census of power plants and in collecting information for use in the compilation of articles on the economic position of the weaving industry and industrial occupations in connexion with the Provincial census. The Director visited Simla in April and Cawnpore in October to attend the conferences of Directors of Industries. In June 1920, he was deputed to Ceylon to investigate the possibility of starting in this Presidency a factory for the manufacture of finished rubber goods. He visited Bangalore on three occasions in order to attend meetings of the Council of the Indian Institute of Science and also other places. The appointment of the Controller of Munitions held by the Director was abolished with effect from the 23rd March 1921 and the work of winding up the commitments of the Indian Munitions Board at Madras proved to be one of considerable magnitude. The department participated in three exhibitions held during the year and the exhibits aroused a great deal of interest. The Textile branch of the department and the Kerala Soap Institute, Calicut, were awarded gold medals. As a result of the action taken on the recommendations of the Indian Industrial Commission, an Advisory Board of Industries was constituted in November 1920 consisting of twelve members. The Director of Industries is the Chairman and convenor of the Board and the remaining eleven members are non-officials. The functions of the Board are, as its name implies, advisory, but all matters of general importance affecting industries or industrial education, including the budget, are laid before it. The Board has already established itself as an advisory body of great value to the department. Evidence of the growing appreciation of the work done by the Bureau of Industrial and Commercial Information was reflected in a considerable increase in the number of inquiries received on industrial and commercial questions. The Bureau possesses up-to-date information as to the activities of all firms of standing, the articles and goods which they export and import, the agencies which they hold and the firms they represent. The possibilities of commercial exploitation of several substances were examined and the results recorded. Endeavours were also made to interest private capital in such exploitation. A number of samples of minerals were forwarded to the Geological Survey of India for examination and the results thereof communicated to interested parties.

Pumping and Boring operations

The Pumping and Boring Department with the workshop attached to it was transferred from the Department of Agriculture to the Department of Industries with effect from the 9th September 1920. General information and advice on engineering questions was given free of charge, but a fee of Rs. 10 was demanded in cases where local inspection was necessary. The number of parties who

paid inspection fees for preliminary investigation of their projects during the year was 152, of which 106 related to the pumping and boring operations, and the remaining 46 to industrial engineering questions. In spite of the decrease in the cost of machinery and plant, the progressive fall in exchange restricted the number of new erections. Of the 21 installations completed during the year, 11 were of new and 10 of second-hand plant in new ownership or transferred to more suitable sites by their original owners. Twenty-six applications for loans, in connexion with the purchase and installations of pumping machinery, were received during the year and an aggregate amount of Rs. 12,000 was sanctioned for disbursement to two applicants. The number of installations under maintenance decreased during the year from 300 to 228. This decrease may perhaps be attributed to the increasing confidence of owners in their own ability to maintain plants in a satisfactory condition, but is more likely to be due to short-sighted parsimony provoked by hard times. The greater part of the work done in the tannery during the year was in connexion with chrome tannages, but work on certain other classes of tannage was also carried on. Further experimental work in the production of chamois leather was carried on and leather of good quality was finally produced. Experiments on the tannage of shark skins by a method reported to have been a commercial success in America were made and are being continued, but the local practice of leaving the skin on the flesh, and the high cost of tanning militate against its success. Hides and skins

At the commencement of the year there were two peripatetic weaving parties in existence and sanction was accorded to the employment of ten additional parties to demonstrate to weavers the advantages of improved methods and appliances ; but only five of these were organized during the year. The Weaving Expert devoted considerable attention during the year to devising improvements in weaving machinery and appliances and to organizing and placing on a satisfactory basis the departmental manufacture of such appliances. A number of working drawings were made and the manufacture of model looms and improved appliances including winding, warping and sizing machines required for the several peripatetic weaving parties was undertaken at the Madura Industrial Institute. The improved appliances attracted much attention and several orders for various types of machinery were received from the public. Instruction in hand-loom weaving was given in many industrial schools in the Presidency : but it was conducted on primitive lines, and sizing, which is of the first importance, was entirely neglected. To overcome the difficulty experienced by many school authorities in arranging for their yarn to be sized, a simple type of hand-sizing machine was devised. Textile industry

The utilization of indigenous dyes did not reach the high-water-mark even with the shortage of foreign dyes and the demand was still chiefly for suitable synthetics. A number of comparative trials were made during the year, and advice given in regard to the suitability of dye-stuffs for specific purposes. The Industrial Chemist was engaged during the latter part of the year in carrying out inquiries in connexion with the production of power alcohol. Chemical industries

The demand for soap manufactured by the Kerala Soap Institute at Calicut (formerly known as the Government Soap Works) was not maintained at the level of the previous year, and there was a corresponding reduction in outturn. The falling off in the demand was due to the increase in the price of soaps consequent on the rise in the price of raw materials and to the competition of foreign soaps which were imported and stocked, when the rate of exchange ruled in favour of importers. There was a good demand for insecticidal soaps made from fish-oil for use by planters and horticulturists. The demand for textile soaps from cotton mills showed a reduction and the Institute worked at a loss. Though a large number of small factories have come into existence on the west coast and elsewhere during the last few years, the products of these factories are generally inferior and in many cases positively injurious. Kerala Soap Institute

The Government sanctioned during the year the construction of an Industrial Institute at Coonoor. The object of the institute is to

create an organized fruit preserving industry on the Nilgiris, and at the same time to encourage an extension of existing fruit culture. At the Industrial Laboratory, Coonoor, the further investigation of high grade inks, such as those commonly known as "blue-black writing fluids" was proceeded with. A number of experiments were made, and certain formulæ having given promising results, a commencement was made with the manufacture of ink on a commercial scale. The inks produced are reported to be equal in quality to the standard imported ones. Difficulty is, however, experienced for want of suitable receptacles for storing purposes. No progress was made in the Laboratory in regard to the manufacture of adhesives and vinegar. In November 1920, the conduct of experiments at the Sugarcane Crushing Factory at Pallapalaiyam was transferred from the control of the Director of Agriculture to that of the Director of Industries; the factory continued to work at a loss.

Industrial Laboratory, Coonoor

Industrial education

161. In addition to the Government of India State Technical Scholarship already held by a Madras student, the Local Government awarded three scholarships of the value of £250 from provincial funds for study abroad. The eight Indian Institute of Science scholarships granted in the previous year for the study of applied chemistry at the Indian Institute of Science, Bangalore, were increased in value from Rs. 50 to Rs. 60 per mensem and four additional scholarships were awarded. The object of the institution of these scholarships is to provide adequate facilities for the training of well-educated young men of the Presidency for employment in chemical industries. In view of a probably large demand for industrial chemists, the number of these scholarships has, since the close of the year, been increased to 18. Three scholarships of the value of Rs. 30 per mensem tenable in the Victoria Jubilee Technical Institute, Bombay, were awarded during the year—one for the study of Sanitary Engineering and Plumbing, one for the study of Technical and Applied Chemistry and the third for the study of Textile Manufacture. These scholarships have never been popular, and in no year, since the scheme was inaugurated, have all the scholarships been taken up. The system governing the award of scholarships in industrial schools was also revised. The Government Trades School, Madras, which was started in 1916 as an experimental school of afternoon classes for apprentices engaged in the engineering and plumbing trades in Madras, more than maintained its early promise. It has now 250 students on the rolls. The branch of the Trades School, which was established last year in connexion with the Perambur Railway Workshops of the Madras and Southern Mahratta Railway, also developed satisfactorily. Two separate courses are now conducted to suit the varying educational attainments of the apprentices employed in the works. The classes conducted at Perambur furnish an interesting instance of the value of co-operation between the Department of Industries and a large works organization. The Railway authorities provide the building and equipment and arrange to send their apprentices, while the Madras Trades School furnishes the trained staff required for tuition and supervision—the Railway bearing the cost of such tuition, and the cost of supervision being borne by the Trades School. The number of industrial schools assisted by Government during the year was 37. The number of pupils under training in these schools was 1,696. The Government grant-in-aid during the year amounted to Rs. 77,404-9-9 and the schools generally maintained the progress of previous years. The School of Arts was transferred from the control of the Director of Public Instruction to that of the Director of Industries with effect from the 1st October 1920. The number of pupils on the rolls on the 31st March 1921 increased by 19 to 241, of whom 24 were females. The average attendance during the year was 145 as against 154 in the previous year.. The percentage of pupils drawn from the artisan class dropped slightly from 65·5 to 64 per cent. One hundred and seventy-six pupils went up for the technical examinations, of whom 149 were successful.

Madras Trades School

Aided industrial schools

School of Arts

Finance

162. The total expenditure on the department rose from Rs. 6·38 lakhs to Rs. 8·69 lakhs, whereas the total receipts fell from Rs. 3·31 lakhs to Rs. 2·58 lakhs. The net cost was therefore Rs. 6·11 lakhs against Rs. 3·07 lakhs in the previous year. The increase in expenditure was mainly due to the transfer to the department during the year of the pumping and boring operations and the School of Arts, and to the additions to the district staff.

SEA-BORNE TRADE (1920–21)

[*Review of the Sea-Borne Trade of the Madras Presidency for the year 1920–21; Annual Volume of the Sea-Borne Trade and Navigation of the Madras Presidency; Statistics of British India, Vol. I, Commercial Statistics—Foreign Trade and Shipping; Review of the Trade of India. Accounts relating to the Sea-borne Trade of British India. Annual Statement of the Foreign Sea-borne Trade and Navigation of British India, 2 Vols.; Annual Statement of the Coasting Trade and Navigation of British India*]

General summary

163. The aggregate value of the sea-borne trade of the Madras Presidency was Rs. 73·28 crores, showing an increase of Rs. 1·12 crores or 1·5 per cent as compared with that of the preceding year and of Rs. 15·12 crores or 26 per cent as compared with 1913–14. The year was more strikingly abnormal than any of the war years. After the armistice, as after all wars, trade boomed, since every country had to replenish depleted stocks at any cost. But the inevitable depression followed with unexpected and unexampled rapidity. There was a dramatic collapse of the exchange of those countries whose credit enabled them or whose needs compelled them to import largely, and this collapse naturally depreciated or even destroyed the purchasing power of the countries affected. The reaction on those countries which had goods to export was immediate, and India was a notable sufferer. During the war and the post-war trade boom, so great was the demand for her products that the rupee was bound to appreciate, and this appreciation was in a sense artificially stimulated by the action taken on the Babington Smith Currency Committee's report. Imports for which orders had been placed when exchange was high continued to flow in, and the very fact of the fall in exchange enhanced their rupee value, while the export trade stagnated owing to the fact that those who wanted India's products could not afford to buy them, and those who could afford to buy them were saddled with large stocks bought at high prices which they had to unload before they could safely buy cheaper stocks. This resulted in an adverse balance of trade.

Foreign trade

Foreign imports

164. Foreign trade including Government transactions declined by Rs. 2·03 crores or 4 per cent, as compared with the previous year. Under foreign trade, imports expanded by Rs. 11·45 crores or 82 per cent, while exports declined by Rs. 13·48 crores or 37 per cent. There was an increase of Rs. 11·59 crores or 87 per cent in the imports of private merchandise due to larger receipts of cotton twist and yarn and manufactures, metals, railway materials, machinery, paper, motor-vehicles, hardware, apparel, articles by post, provisions, liquors, instruments, chemicals, raw silk, precious stones, sugar, stationery, glassware and dyeing and tanning substances, the chief item showing a decrease being mineral oils. The value of imports of cotton twist and yarn improved by 78 per cent and that of cotton piece-goods by 64 per cent as compared with that of the previous year. Owing to the depletion of stocks on account of the war, large orders had to be placed at Home at constantly rising sterling rates, which rise was obscured by the rise in exchange. Until the rupee started rising, most of the piece-goods business in Madras was done in rupees. When the rupee fell below 2*s.*, the usual "two-shilling" resolution was passed, and the result was that the exchange banks and European-indenting firms had to clear the goods, the drafts for

which were not retired by the dealers. Ability of the manufacturers to make better deliveries contributed to the larger imports of metals, railway materials and machinery which increased by 142, 252 and 155 per cent. A fall in value coupled with a favourable rate of exchange induced heavy speculative buying of paper, the imports of which rose by 340 per cent. Imports of motor-vehicles and hardware went up by 216 and 126 per cent owing to restricted supply in previous years. On the other hand the decrease of 39 per cent under mineral oils was caused by the large replenishments of stocks in the previous year. Exports of private merchandise declined by Rs. 13·16 crores or 37 per cent as the result of reduced shipments of leather, raw cotton, raw skins, cotton twist and yarn, seeds, manures, spices, palmyra fibre, indigo, raw jute and oils. Exports of leather declined by 72 per cent and those of raw skins by 75 per cent due to the large accumulation of stocks in the consuming countries and general trade depression. The decrease of 47 per cent in the value of exports of raw cotton was partly due to smaller demand for Indian cotton as a result of the rapid fall in the price of American and Egyptian cotton and partly to diversion of consignments to the port of Bombay owing to cheaper freight rates. The serious financial crisis in Japan was also responsible for a reduction of shipments to that country. A decline of 69 per cent was noticeable in the value of shipments of cotton twist to China owing to abnormally larger despatches of the previous year. There was a decline of 16 per cent in the value of exports of seeds, partly due to a fall in the French demand for groundnuts on account of exchange difficulties and partly to smaller shipments of copra to the United Kingdom.

Foreign exports

Government transactions

165. The total value of Government stores imported and exported amounted to Rs. 30·11 lakhs and Rs. 0·68 lakh, as compared with Rs. 45·18 lakhs and Rs. 2·76 lakhs, respectively, in the previous year. The decrease of Rs. 15·07 lakhs under imports was caused by reduced imports of apparel (— Rs. 8·07 lakhs), woollen piece-goods (— Rs. 4·50 lakhs), arms and ammunition (— Rs. 2·98 lakhs), and instruments (— Rs. 1·03 lakhs), partly counterbalanced by larger imports of machinery (+ Rs. 1·54 lakhs), hardware (+ Rs. 1·27 lakhs), and metals (+ Rs. 1·17 lakhs). Smaller exports of apparel and arms and ammunition were responsible for a decrease of Rs. 2·08 lakhs under exports.

Shipping

166. There was an increase of 14 per cent in the total amount of tonnage (2·46 million tons) available during the year for the carriage of ordinary merchandise, but the total number of vessels entered and cleared declined from 2,588 to 2,476. The average tonnage per vessel advanced from 830 to 994 tons. The number of vessels (excluding native craft) under the British flag which entered and cleared was 1,813 with an aggregate tonnage of 2,109,358 as against 1,832 of 1,924,286 tons. The number of vessels under foreign colours was 93 with a tonnage of 298,732 tons against 73 of 163,470 tons. The number of vessels in the coasting trade declined from 32,229 to 30,214, but their tonnage rose from 5,920,063 to 8,375,223. The gradual weakening of the freight rates continued during the year as more tonnage became available.

Trade according to countries

167. The trade with the United Kingdom represented 52 per cent of the total trade, as compared with 48 per cent in 1919–20 and expanded by Rs. 95·48 lakhs or 4 per cent. The trade with the British Empire, representing 71 per cent of the aggregate trade of the Presidency, improved by Rs. 43·32 lakhs or 1 per cent. The trade with the continent of Europe showed an increase by Rs. 213·79 lakhs or 45 per cent and the increase occurred mainly in the trade with Belgium, Germany, Holland and Norway. The trade with France showed a decrease. Decreased transactions with Japan and China resulted in a reduction of Rs. 237·97 lakhs in the trade with Asiatic ports. Interchanges with America, which were practically confined to the United States, declined by Rs. 187·63 lakhs or 35 per cent.

168. The total value of the coasting trade excluding Government transactions improved by Rs. 0·93 crore or 4 per cent. Imports advanced from Rs. 14·51 crores to Rs. 14·7 crores or 1 per cent as the net result of larger receipts of coal, timber, cotton twist, yarn and piece-goods, partly counterbalanced by smaller receipts of grain and pulse. Exports improved from Rs. 7·5 crores to Rs. 8·26 crores or by 10 per cent in consequence of larger shipments of coconuts, coconut oil, cotton, raw and twist and yarn and sugar. **Coasting trade**

169. The chief port registered a total trade of Rs. 38·26 crores as against Rs. 37·2 crores (an increase of Rs. 1·06 crores or 3 per cent), representing 52 per cent of the aggregate trade of the Presidency. The value of the sea-borne trade on private account at the port of Madras represented 50 per cent of the total trade of the whole Presidency, as compared with 51 per cent in the previous year and 41 per cent in 1913–14, and amounted to Rs. 3,555·38 lakhs as against Rs. 3,654·25 lakhs in 1919–20, a decrease of Rs. 98·87 lakhs or 3 per cent. The total trade of the outports amounted to Rs. 35·02 crores as compared with Rs. 34·96 crores in the previous year. To this total the ports of Cochin and Tuticorin alone contributed more than half, the other ports with a trade of over one crore being Calicut, Mangalore, Dhanushkodi, Negapatam, Cocanada and Cuddalore. Tuticorin for the first time lost its place in favour of Cochin as the first of the outports, but it still retained its pre-eminence in foreign trade. The relative importance of trade of the other principal outports was much the same as in the previous year. The trade of Cochin, Calicut, Negapatam and Cocanada improved by 23, 0·5, 28 and 6 per cent, respectively, while that of Tuticorin, Mangalore, Dhanushkodi and Cuddalore declined by 19, 14, 11 and 13 per cent. **Ports**

170. The total revenue receipts for the Presidency rose from Rs. 1,28,25,915 to the record figure of Rs. 1,94,60,318, or by 52 per cent. The total disbursements of the Customs Department throughout the Presidency amounted to Rs. 9,19,806 as compared with Rs. 7,72,311 in 1919–20. Excluding adjustments in the shape of refunds and drawbacks, the net cost of the department was Rs. 5,00,834 in 1919–20 and Rs. 6,39,949 in 1920–21. The rise was mainly due to revisions of pay and Government's grant of special allowances to the subordinate staff to compensate them for the rise in the cost of living. Part of the increase is more apparent than real, and only represents the distribution of rewards to members of the department and others whose services resulted in the detection and confiscation of smuggled gold. The number of cases dealt with under the Sea Customs Act (including those under the Merchandise Marks Act) during the year was 1,509 as against 1,186 in the previous year. Of these, 991 cases occurred at Madras and 518 at the outports. The total amount of penalties imposed was Rs. 5,79,019 as against Rs. 3,84,610 in 1919–20, the increase being mainly due to the heavy penalties levied for infringements of the prohibition on the importation of gold into British India. A very large quantity of gold was imported into the French territories of Pondicherry and Karikal by almost every weekly steamer from the Straits and the smugglers' tactics were varied and ingenious. Gold was discovered concealed in secret cavities made in all kinds of conveyances from country carts to motor-cars, in boxes with false bottoms, in the soles of passengers' shoes and in bedding. There were 50 cases of gold smuggling by sea at Madras, 21 at Dhanushkodi, four at Tuticorin, two at Kulasekharapatnam, one at Tondi and one at Adirampatnam. On the land frontiers, 90 such cases were detected at the Pondicherry frontier and 63 at Karikal. During the year Kasaragod in the South Kanara district was thrown open to foreign trade under section 11 of the Sea Customs Act. **Miscellaneous**

PUBLIC WORKS

GENERAL (1920–21)

[*Administration report of the Public Works Department, Madras Presidency, for the year 1920–21*] .

Administrative changes

171. In addition to the Indian Service of Engineers which is an "All-India Service," a new Provincial Engineering Service was constituted during the year in respect of officers in charge of permanent subdivisions and their equivalents. With the formation of this new service, the abolition of the upper and lower subordinate services and the creation in their stead of a single subordinate engineering service was decided upon. During the year almost all those officers and subordinates who had been on Military duty returned therefrom. In the I Circle, the period of continuance of the temporary Koraput division was again extended by one year. In the III Circle, the special Penner anicut subdivision in the Cuddapah division was closed as also the Hindri bridge subdivision in the Kurnool division. A new temporary subdivision called the special headquarters subdivision was formed in the Cuddapah division to carry out important building works at Cuddapah town and to complete the Penner anicut works. The section at Chintaldevi in the V Circle was constituted a separate subdivision. On account of the heaviness of work, the combined office of the Electrical Inspector and Electrical Engineer to Government was split up and an Electrical Engineer's division formed. In the VI Circle, a temporary subdivision designated "Madura Drainage Subdivision" was formed to push forward the drainage scheme in Madura and in the VII Circle. The Toludur project division was amalgamated with the South Arcot division.

Chief Engineer's office

Technical section

172. Fifty-seven estimates of the aggregate value of Rs. 97·69 lakhs were scrutinized in the Technical section of the Chief Engineer's office. Seventeen of these totalling Rs. 59·89 lakhs related to water-supply, ten aggregating Rs. 10·37 lakhs to drainage, and 18 totalling Rs. 18·74 lakhs to roads and bridges. The balance of Rs. 8·69 lakhs related to 12 miscellaneous schemes. The most important of the schemes dealt with were the Bellary water-supply scheme (Rs. 16·46 lakhs), and the Cuddalore water-supply scheme (Rs. 16·00 lakhs). Besides these 189 estimates of the total value of Rs. 132 lakhs were scrutinized, of which 42 were for works estimated to cost over Rs. 1 lakh each, 38 for works costing over half a lakh each and the rest for those costing less than half a lakh each.

Consulting Architect's section

The Consulting Architect was, as usual, engaged in the preparation of drawings and estimates for buildings. During the year a special Consulting Architect was temporarily appointed to work out the lay-out and designs of Government buildings required for public offices and officers' residences ; one hundred and twenty-one preliminary schemes and working drawings estimated to cost Rs. 4·3 lakhs were drawn up in his section.

Electrical schemes and works

The use of electricity is becoming more and more popular both in the city and in the mufassal. Apart from its use for fans and lights, the larger Presidency hospitals and other institutions are using it for driving pumps, lifts, sterilizers and medical appliances. A licence was granted for the supply of electric energy to Coimbatore and the question of the grant of similar licences in respect of five other towns was under consideration. The Madras Electric Supply Corporation was subject to a strike of several months' duration ; there was, however, no interruption of supply. The dislocation of supply brought about by strikes in England checked the extended use of electricity in Madras City. The Electrical Engineer to Government scrutinized during the year 166 estimates of the aggregate value of Rs. 3·08 lakhs. The expenditure on original works rose from Rs. 1·14 lakhs to Rs. 2·54 lakhs and the amount spent on the maintenance of electrical installations in charge of the Public Works Department, apart from the actual consumption charges, increased, by Rs. 0·02 lakh, to Rs. 1·16 lakhs.

CIVIL WORKS (1920-21)

173. The total expenditure for the year on civil works including expenditure from contributions, minor works and repairs was Rs. 79·08 lakhs as against Rs. 65·10 lakhs in the previous year. Good progress was made during the year in regard to the new civil hospital at Vizagapatam, the expenditure being Rs. 1·06 lakhs which brings the total outlay to Rs. 4·34 lakhs against the estimated cost of Rs. 6·01 lakhs. The expenditure on improvements to the Government House at Ootacamund was Rs. 1·27 lakhs against the estimated cost of Rs. 1·80 lakhs. A sum of Rs. 2·91 lakhs was spent on the construction of an upper storey over the new Council Chamber at Fort St. George and for alterations to the old buildings to make them suitable for the enlarged Legislative Council under the Reforms scheme. Very good progress also was made on the new Engineering College Works, Guindy. The expenditure was Rs. 2·78 lakhs and the total outlay to end of the year Rs. 14·59 lakhs against the estimated cost of Rs. 15·84 lakhs. The new Rayapuram hospital was also in progress. The expenditure during the year was Rs. 1·50 lakhs, bringing the total outlay to Rs. 9·09 lakhs against the estimated cost of Rs. 11·11 lakhs. An outlay of Rs. 0·52 lakh was incurred during the year in the construction of a pier, 560 feet long with a sea-face wall at Tellicherry, bringing up the total to Rs. 2·77 lakhs against the estimated cost of Rs. 3·42 lakhs. The work of connecting up Jeypore-Arakar road with Anantagiri-Ghat road, which was commenced in October 1919, has been in steady progress ever since. The outlay during the year on the Kunnavaram-Ippur road was Rs. 10,489, bringing the total outlay to Rs. 0·46 lakh against the estimated cost of Rs. 1·08 lakhs. The construction of a bridge across the Hindri river at Kurnool estimated to cost Rs. 1·98 lakhs was completed and the bridge opened for public traffic on the 2nd July 1920. Good progress was made in regard to the widening of the Government House bridge and the reconstruction of the Penitentiary bridge at Madras. The expenditure during the year was Rs. 3·04 lakhs, bringing the total outlay to Rs. 3·53 lakhs against the estimated cost of Rs. 5·71 lakhs. The construction of a bridge across the Amaravathi at Chinnadarapuram was completed, the total outlay being Rs. 1·08 lakhs. During the year an outlay of Rs. 1·51 lakhs was incurred on the Anantapur water-supply scheme estimated to cost Rs. 2·63 lakhs. Work on the Chingleput water-supply scheme was in progress, the total outlay to end of the year being Rs. 0·55 lakh against the estimated cost of Rs. 2·05 lakhs. An expenditure of Rs. 0·33 lakh was incurred on improvements to Madura Water Works, bringing the total outlay to Rs. 6·18 lakhs against the estimated cost of Rs. 6·42 lakhs. Work on the Rameswaram water-supply scheme was also in progress. The outlay during the year was Rs. 0·38 lakh, the total outlay being Rs. 2·15 lakhs. The outlay during the year on the Tuticorin water-supply scheme was Rs. 2·37 lakhs, bringing the total outlay to Rs. 4·10 lakhs against the estimated cost of Rs. 18·47 lakhs. A sum of Rs. 0·24 lakh was spent during the year on improvements to the Tanjore Water Works estimated to cost Rs. 1·17 lakhs. Good progress was also made on the Madura drainage scheme. The expenditure during the year was Rs. 5·50 lakhs, bringing the total outlay to Rs. 20·42 lakhs against the estimated cost of Rs. 38·21 lakhs. The expenditure on the Vellore drainage scheme was Rs. 0·81 lakh, bringing the total outlay to Rs. 3·65 lakhs against the estimated cost of Rs. 4·37 lakhs. Other major works of water-supply and drainage were also in progress during the year.

Works in progress

Buildings

Communications

Water-supply and drainage

174. The value of work done during the year under all heads in the Dowlaishwaram workshops amounted to Rs. 2·19 lakhs as against Rs. 2·36 lakhs in the previous year, the decrease being due to restricted expenditure on irrigation works. In the Bezwada workshops the value of work turned out increased from Rs. 1·02 lakhs to Rs. 1·07 lakhs. The value of outturn in the Public Works Workshops at Madras again rose, by Rs. 1·22 lakhs, to Rs. 4·45 lakhs, which is the highest on record during the last decade.

Workshops

RAILWAYS (1920-21)

[*Administration report of the Public Works Department, Madras Presidency, for the year 1920-21; Statistics of British India, Vol. I, Commercial Statistics—Railways*]

Control

175. The railway systems in the Presidency are controlled by the Railway Board. The District Board Railways are, however, subject to the general control of the Local Government. The open mileage at the beginning of the year was 1,700 miles broad gauge, 2,002 miles metre gauge and 123 miles narrow gauge. Besides this, there were 237 miles of railway owned by the District Boards of Tanjore, Kistna, Coimbatore,

Development

Guntūr and Salem. During the year there was an addition of 15 miles to the open mileage on the broad gauge system. The Guntūr-Tenali Railway (about 15 miles in length), which was dismantled during the war, was restored and re-opened for traffic on the 1st November 1920. Proposals for re-commencing the construction of the Tinnevelly-Tiruchendur railway were also under consideration. The survey of the Shoranur-Manantoddy line was in progress. In January 1921 the Railway Board sanctioned the survey of a light metre gauge railway, about 80 miles in length, connecting Mannar in the High Range with the Cochin

Accidents

State Railway via the Anamalais: and this was also in progress. There was no appreciable decrease in the total number of accidents during the year. Two accidents were, however, serious and, of these, one was a collision between the Mēttupalaiyam Mail and a goods train at Bommidi station on the 14th December 1920 causing forty-seven deaths and also injuries to thirty-four passengers, besides extensive damage to the mail train engine and the rolling stock of both trains. The other was the wrecking of the Bangalore Mail on the 7th October 1920 owing to the removal of a rail by some unknown persons, which resulted in the loss of thirteen lives and injuries to twenty-two passengers, besides serious damage to the engine and the rolling stock. There were many attempts at train wrecking on certain sections of both the South Indian and the Madras and Southern Mahratta Railways by placing obstructions on the track. Attempts to find out the culprits have so far been of no avail. Owing to continuous and exceptionally heavy rains in November and December 1920 and a cyclonic storm in January 1921, there were many serious breaches on various sections of the South Indian Railway, which

Miscellaneous

caused considerable interruptions to traffic. The Indian Railway Committee visited Madras in January 1921 and conducted its inquiries. Generally the improvement in train services was slight and the existing provision was quite inadequate to meet public requirements. The model form of agreement for working District Board Railways, as finally approved by the Railway Board, was communicated to District Boards and Railway Administrations.

TRAMWAYS (1920-21)

176. The route mileage operated upon by the Madras Electric Tramway system in Madras City remained the same as in the previous year, viz., 14 miles, 6 furlongs and 107 yards. One mile, 3 furlongs and 96 yards of double track were under construction, of which all excepting 2 furlongs and 77 yards were completed. The line equipment is overhead trolly system throughout, suspended by side or centre poles. The plant at the power station is kept as a standby, current being obtained, as usual, from the Madras Electric Supply Corporation, Limited. The rolling stock consisted of 80 motor cars, 20 trailers, 1 special car, 1 road-metal carrying car and 1 watering car. No cars were constructed or reconstructed during the year. Though the average daily service rose from 67 cars to 75 cars, the car mileage fell from 1,463,721 miles to 1,355, 808 miles. There was a further fall in the number of passengers carried from 21,746,621 to 20,347,640.

CANALS (1920-21)

177. Navigation was carried on as usual on the Chilka lake canal, the Dumagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vedaranniyam canals. Excluding the Chilka lake canal and the West Coast canals, for which figures are not available, the total receipts amounted to Rs. 2·71 lakhs or Rs. 0·06 lakh less than in the previous year. The decrease occurred chiefly under the Kistna and the Buckingham canals. The fall under the Kistna canals was due mainly to a number of boats having been utilized in connexion with the Gōdāvari Pushkaram festival during the early part of the year. In the case of the Buckingham canal the decrease was caused by the removal of restrictions on railway traffic imposed originally on account of the war.

IRRIGATION (1920-21)

[*Statistics of British India, Vol. I, Commercial Statistics—Irrigation*]

178. The expenditure incurred on irrigation works rose, by Rs. 3·93 lakhs, to Rs. 80·65 lakhs, but the revenue derived therefrom fell from Rs. 285·72 lakhs to Rs. 277·05 lakhs. The area charged as irrigated was 7,298,567 acres or 393,963 acres less than in 1919–20. **Gross expenditure and revenue**

179. As in the previous year there were four works classed as "Major Protective works." Of these, the Rushikulya system and the Venkatapuram and Bhavanasi tanks were in operation and the Mopad reservoir project was completed during the year. The capital outlay was Rs. 0·76 lakh (direct and indirect) as against Rs. 1·52 lakhs in the previous year, and the bulk of this expenditure was incurred on the Mopad reservoir project. The area irrigated under the Rushikulya system rose by 787 acres to 106,104 acres under first crop, but under second crop it fell by 1,235 acres to 1,967 acres. The gross revenue, including that from old irrigation, rose from Rs. 2·42 lakhs to Rs. 2·57 lakhs and the working expenses from Rs. 0·66 lakh to Rs. 0·85 lakh. The net revenue after deducting interest charges showed a deficit of Rs. 1·48 lakhs as in the previous year. The capital outlay on productive works (direct and indirect) rose from Rs. 7·12 lakhs to Rs. 8·37 lakhs and was incurred mainly on the Gōdāvari and the Cauvery delta systems and the Toludur project, the last of which continued to be the only work of this class under construction. In the Gōdāvari delta system the improvements to the Kovvur-Manjair Junction canal, the Ainapur drain and the upper portion of the Yenamadurru drain were in progress. In the Cauvery delta system the improvements to Lawford's Straight cut and the construction of a regulator across the Korayar were in progress. The total area charged as irrigated rose by 50,870 acres to 3,077,660 acres under first crop, but fell by 233,660 acres to 457,030 acres under second crop. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 162·77 lakhs and Rs. 32·10 lakhs, respectively, against Rs. 168·11 lakhs and Rs. 30·23 lakhs in the previous year. The net revenue due to improvements was Rs. 88·25 lakhs against Rs. 95·40 lakhs in the previous year, representing a return of 9·85 per cent on the capital outlay of Rs. 8·96 crores. After deducting interest charges the profit for the year was Rs. 59·91 lakhs against Rs. 66·65 lakhs in the previous year and accumulated profits to the end of the year amounted to Rs. 18·60 crores. Compared with the previous year, the gross revenue showed a decrease of Rs. 5·34 lakhs. This occurred chiefly under the Gōdāvari delta system and was due mainly to the failure of supply in the second crop season and consequent deficiency in the second crop cultivation. There was an increase of Rs. 1·87 lakhs under "Working expenses" due chiefly to the payment of increased salaries to the members of the "Works" establishment. The remissions granted under "Protective" and "Productive" works were Rs. 1,875 and Rs. 2·20 lakhs

Class I, Major works

Protective works

Productive works

Revenue

Expenditure under revenue account

Remissions

respectively against Rs. 2,518 and Rs. 2·27 lakhs in the previous year. They were granted mostly in the Gōdāvari and the Kistna delta systems.

Class II, Minor works and navigation

180. The capital outlay (direct and indirect) on Minor works and Navigation was Rs. 0·35 lakh, incurred chiefly on the Kaniyampalayam anicut project in the Coimbatore district and the Madras water-supply and irrigation system. The area charged as irrigated rose by 3,242 acres to 276,652 acres under first crop, but fell by 1,304 acres to 91,764 acres under second crop. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 15·04 lakhs and Rs. 5·07 lakhs against Rs. 14·88 lakhs and Rs. 5·08 lakhs, respectively, in the previous year. The net revenue due to improvements rose by Rs. 0·16 lakh. Remissions also rose from Rs. 0·11 lakh to Rs. 0·44 lakh and were granted chiefly under the Cumbum tank.

Class III works

181. The outlay on Class III works, including that incurred by Civil officers and accounted for by the Civil department, was Rs. 29·65 lakhs as against Rs. 28·48 lakhs in the previous year. The area charged as irrigated fell from 3,500,053 acres to 3,287,390 acres and the revenue inclusive of the amount collected in the Public Works department was Rs. 95·74 lakhs against Rs. 99·21 lakhs in the previous year. A sum of Rs. 10 lakhs was remitted as against Rs. 3·70 lakhs in the previous year.

Tank Restoration scheme

The total area coming within the scope of Tank Restoration scheme investigation was 103,750 square miles. During the year an area of 2,095 square miles of minor basins was entered upon and 1,469 square miles investigated, bringing up the totals to 87,367 square miles and 81,511 square miles respectively. Works were completed for 75,426 square miles of the area investigated, were in progress for 4,148 square miles and were not commenced in the balance of 1,937 square miles. Estimates for Government works were sanctioned to the extent of Rs. 4·52 lakhs or Rs. 0·18 lakh less than in the previous year. The total amount sanctioned under this head from the beginning of the operations up to the end of the year was Rs. 153·88 lakhs. The expenditure during the year was Rs. 3·59 lakhs or Rs. 5·36 lakhs including percentage charges.

Class IV, Agricultural works

182. The outlay incurred on Agricultural works rose from Rs. 6·58 lakhs to Rs. 7·17 lakhs, but the revenue fell from Rs. 1·10 lakhs to Rs. 0·94 lakh.

Investigation of projects

183. The estimate for the Cauvery reservoir project was still under the consideration of the Government of India. The Vengalapuram project in the Nellore district, the Velgode project in the Kurnool district and improvements to the Kurnool-Cuddapah canal were also under consideration. In the Ganjām district, estimates for improvements to the Girisola channel were returned to the Superintending Engineer for revision. Estimates in connexion with the Koratholi Tampara and the Jayamangalam channel were revised. Proposals relating to the Coringa island project were generally approved by the Chief Engineer and the estimates therefor returned to the Superintending Engineer for revision. Estimates for the Polavaram island project were under the consideration of the Chief Engineer. A scheme to raise water from the Kistna river by pumping at or near Pratur in the Guntūr district for the irrigation of an extent of 10,768 acres in the Tenali and Guntūr taluks was estimated to cost Rs. 19 lakhs for "Works": and the question of undertaking the project as an agricultural experiment to test the prospects of garden crop cultivation was under consideration of the Government. The Amaravati reservoir project was abandoned as being financially impracticable, while the question of the transport of forest produce by navigation over the Nilambūr river was under consideration. Estimates for improvements to the Viranum tank and the Vadavar were under revision with reference to certain criticisms made by the Government of India.

Small projects

Miscellaneous

184. In the Cauvery delta the rainfall was much above the average and the floods in the rivers were the heaviest since 1884. The banks of the rivers were unable to withstand the floods and breached in several places causing considerable damage to the lands on both sides. Almost

all the breaches were temporarily closed and water was allowed for irrigation; but the unexpected floods of January 1921 re-opened the breaches and caused further damage. By the end of the year, almost all the breaches were closed. The preparation of ayacut maps for the Kistna delta was still in progress.

Hydro-electric surveys

185. The concession granted to Mr. A. H. Garrett in November 1919 for the utilization of water power from the Periyar lake was transferred by him to a Syndicate which included, among others, Sir Alfred Chatterton of Bombay. A concession was granted in October 1920 to Messrs. Tata Sons, Limited, Bombay, for the generation of power from the Kundah river in the Nilgiris for the supply of electrical energy to the Municipalities of Coonoor, Ootacamund and Coimbatore, and also to the Cantonment of Wellington. The question of the grant of similar concessions to others for the generation of power from the Pykara river in the Nilgiris and from the Kathivadiar in the Kollimalais, Trichinopoly district, was under consideration. The party, detailed in 1919, was engaged during the year in the survey of the Kolab, Dadi and Machkand-Duduma schemes in the Vizagapatam district and the Pinjakavi-Berijam scheme in the Madura district. In addition, a special officer was employed for four months and five new schemes were inspected. Information was received in respect of 60 possible schemes up to the 1st November 1921. Of these it was only possible to estimate the total horse power in the case of forty-eight, which came to over 168,000. Of the new schemes investigated and not mentioned in the previous report, the Pinjakavi-Berijam one seemed to be the most promising.

CHAPTER V

REVENUE AND FINANCE (1920–21)

[*Statistics of British India, Vol. II, Financial Statistics*]

REVENUE AND FINANCE OTHER THAN MUNICIPAL

(*a*) GROSS REVENUE

Revenue and expenditure

186. The following statements give the figures during each of the past two years of the Imperial and Provincial revenue and expenditure as well as the capital expenditure on State Railways and Irrigation Works not charged to Revenue :—

A.—Imperial and Provincial Funds—Receipts

Heads of account.	Imperial		Provincial		Total	
	1919-20	1920-21	1919-20	1920-21	1919-20	1920-21
Principal heads of revenue.	RS.	RS.	RS.	RS.	RS.	RS.
I. Land Revenue	3,56,30,793	3,44,93,314	3,56,30,793	3,44,93,314	7,12,61,586	6,89,86,628
II. Opium	6,07,115	6,21,121	...	...	6,07,115	6,21,121
III. Salt	1,51,53,932	1,46,12,475	...	...	1,51,53,932	1,46,12,475
IV. Stamps	94,08,020	90,11,322	94,08,020	90,11,322	1,88,16,040	1,80,22,644
V. Excise	2,68,07,425	2,71,78,452	2,68,07,424	2,71,78,452	5,36,14,849	5,43,56,904
VII. Customs	1,28,25,916	1,95,39,259	...	...	1,28,25,916	1,95,30,259
VIII. Income-tax	1,08,88,314	1,26,53,936	53,46,678	69,99,132	1,62,34,992	1,96,53,068
IX. Forest	...	...	62,34,149	53,81,246	62,34,149	53,81,246
X. Registration	...	...	33,24,153	30,68,745	33,24,153	30,68,745
XI. Tributes from Indian States.	44,96,519	44,96,521	...	...	44,96,519	44,96,521
XII. Interest	8,24,800	8,38,019	4,98,549	5,31,565	13,27,349	13,69,584
Receipts by Civil Departments.						
XVI. Law and Justice—						
A. Courts of Law	...	...	11,94,251	11,16,114	11,94,251	11,16,114
B. Jails	...	...	6,34,450	7,09,841	6,34,450	7,09,841
XVII. Police	...	...	5,81,354	6,91,361	5,81,354	6,91,361
XVIII. Ports and Pilotage	...	...	216	393	216	393
XIX. Education	...	...	6,06,546	10,59,041	6,06,546	10,59,041
XX-A. Medical	...	...	3,17,259	5,93,839	3,17,259	5,93,839
XX-B. Sanitation	...	...	20,953	2,22,677	20,953	2,22,677
XXI-A. Agriculture	...	...	3,92,749	3,90,473	3,92,749	3,92,473
XXI-B. Scientific and Miscellaneous Departments.	...	...	19,46,099	18,15,902	19,46,099	18,15,902
Miscellaneous.						
XXII. Receipts in aid of Superannuation.	90,501	88,955	1,99,285	1,74,843	2,89,786	2,63,798
XXIII. Stationery and Printing ...	23,335	17,642	1,46,355	1,49,161	1,69,690	1,66,803
XXV. Miscellaneous	12,62,415	13,52,975	4,45,914	6,21,578	17,08,329	19,74,553
XXVI. State Railways (gross receipts).	10,42,48,979	10,51,05,701	...	...	10,42,48,979	10,51,05,701
State Railways (Deduct—working expenses).	6,58,31,812	7,62,66,102	...	...	6,58,31,812	7,62,66,102
Net Receipts	3,84,17,167	2,88,39,599	...	...	3,84,17,167	2,88,39,599
XXVIII. Subsidized Companies—Repayment of advance of interest.	12,137	50	...	...	12,137	50
Revenue from Productive Public Works.						
XXIX. Irrigation—Major Works— Direct Receipts	1,70,857	1,73,275	1,70,857	1,73,275	3,41,714	3,46,550
XXX. Minor Works and Navigation in charge of—						
Civil Officers	...	...	13,926	21,727	13,926	21,727
Public Works Officers ...	...	...	2,86,586	2,70,374	2,86,586	2,70,374
XXXI. Civil Works in charge of—						
Civil Officers	...	...	16,915	5,06,099	16,915	5,06,099
Public Works Officers ...	6,132	11,453	5,05,360	5,13,304	5,11,492	5,24,762
Total ...	15,66,29,378	15,39,28,373	9,47,23,841	9,56,93,778	25,13,58,219	24,96,22,151
Transfers between Imperial and Provincial Revenues.	— 30,21,983	— 25,69,449	+ 30,21,983	+ 25,69,449	...	...
Grand Total ...	15,36,07,395	15,13,58,924	9,77,50,824	9,82,63,227	25,13,58,219	24,96,22,151

B.—Imperial and Provincial Funds—Charges

Heads of account.	Imperial		Provincial		Total	
	1919-20	1920-21	1919-20	1920-21	1919-20	1920-21
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.
1. Refunds and drawbacks	18,62,425	21,11,650	8,97,110	15,29,841	27,59,535	36,41,491
2. Assignments and compensations ...	9,38,814	10,05,343	2,92,890	3,38,415	12,31,704	13,43,758
3. Land Revenue	...	...	1,35,76,372	1,80,11,009	1,35,76,372	1,80,11,009
5. Salt	22,36,778	21,94,319	...	...	22,36,778	21,94,319
6. Stamps	2,89,542	2,40,212	2,89,541	2,40,212	5,79,083	4,80,424
7. Excise	11,23,128	12,46,003	11,23,128	12,46,004	22,56,256	24,92,007
9. Customs	5,09,521	6,48,526	...	...	5,09,521	6,48,526
10. Income-tax	74,670	1,74,279	74,671	1,74,279	1,49,341	3,48,558
11. Forest	...	...	36,93,348	45,30,486	36,93,348	45,30,486
12. Registration	...	...	16,78,941	20,97,332	16,78,941	20,97,332
13. Interest	...	...	4,18,070	4,73,198	4,18,070	4,73,198
14. Interest on other obligations	4,05,348	4,29,816	...	...	4,05,348	4,29,816
18. General administration	5,73,582	7,63,486	19,59,401	24,44,030	25,32,983	32,07,516
19. Law and Justice—						
A. Courts of Law	...	...	1,00,29,996	1,20,00,581	1,00,29,996	1,20,00,581
B. Jails	...	...	26,64,585	27,99,499	26,64,585	27,99,499
20. Police	...	...	1,41,70,039	1,76,32,311	1,41,70,039	1,76,32,311
21. Ports and Pilotage	...	...	36,636	52,299	36,636	52,299
22. Education	...	...	1,22,38,182	1,32,90,101	1,22,38,182	1,32,90,101
23. Ecclesiastical	3,44,559	4,41,940	...	...	3,44,559	4,41,940
24-A. Medical	...	...	35,77,554	43,24,054	35,77,554	43,24,054
24-B. Sanitation	...	...	21,65,418	22,84,180	21,65,418	22,84,180
25. Political	1,34,889	73,140	1,01,413	1,08,098	2,36,302	1,81,238
26-A. Agriculture	...	...	19,67,886	21,99,249	19,67,886	21,99,249
26-B. Scientific and Miscellaneous Departments.	19,201	1,22,721	19,49,442	22,29,169	19,68,643	23,51,890
27. Territorial and political pensions ...	2,91,799	2,75,402	...	...	2,91,799	2,75,402
28. Civil furlough and absentee allowances.	33,816	29,231	...	...	33,816	29,231
29. Superannuation and retired allowances.	41,112	38,514	36,98,130	38,05,925	37,39,242	38,44,439
30. Stationery and printing	5,90,103	16,12,200	19,54,563	24,31,280	25,44,666	40,43,480
32. Miscellaneous	1,67,406	67,141	7,96,166	6,54,587	9,63,572	7,21,728
33. Famine relief { in charge of Civil Officers.	11,50,804	2,633	3,83,601	878	15,34,405	3,511
33. Famine relief { Do. P.W. Officers.	17,63,781	30,682	5,87,927	10,227	23,51,708	40,909
34. Construction of protective railways ...	...	60,842	...	...	...	60,842
35. Do. irrigation works ...	1,55,404	81,024	...	...	1,55,404	81,024
40. Subsidized companies	749	1,03,423	...	...	749	1,03,423
41. Miscellaneous railway expenditure ...	34,956	41,558	...	...	34,956	41,558
42. Irrigation (major works)—						
Public Works Officers (Working expenses).	10,45,015	11,51,857	10,45,015	11,51,857	20,90,030	23,03,714
Public Works Officers (Interest on debt).	15,70,426	15,47,975	15,70,426	15,47,976	31,40,852	30,95,951
43. Irrigation (minor works)—						
In charge of Civil Officers	...	...	7,16,033	7,53,071	7,16,033	7,53,071
Do. Public Works Officers.	...	...	33,62,287	33,74,950	33,62,287	33,74,950
45. Civil works—						
In charge of Public Works Officers.	2,33,023	2,21,062	77,30,191	84,40,448	79,63,214	86,61,510
Do. Civil Officers	...	...	34,32,643	28,88,338	34,32,643	28,88,338
Total expenditure charged to Revenue ...	1,55,95,851	1,45,93,295	9,81,86,605	11,30,63,884	11,37,82,456	12,76,57,179
Surplus (+) or Deficit (—) ...	13,80,11,544	13,67,65,629	— 4,35,781	— 1,48,00,657	+ 13,75,75,763	+ 12,19,64,972
Grand Total ...	15,36,07,395	15,13,58,924	9,77,50,824	9,82,63,227	25,13,58,219	24,96,22,151
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.						
48. State Railways	13,40,887	1,10,03,366	...	...	13,40,887	1,10,03,366
49. Irrigation works	5,30,012	7,59,839	...	...	5,30,012	7,59,839
Total, Capital outlay ...	18,70,899	1,17,63,205	...	...	18,70,899	1,17,63,205
Grand Total (Disbursements) ...	1,74,66,750	2,63,56,500	9,81,86,605	11,30,63,884	11,56,53,355	13,94,20,384

Including the receipts and charges of the Civil and Public Works Departments, but excluding the figures relating to the Army, the Post Office and Telegraph department, and the Home Accounts, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 24,96,22,151 or Rs. 17,36,068 less than that of the previous year; the gross expenditure charged to revenue rose, by Rs. 1,38,74,723, to Rs. 12,76,57,179; these figures are, however, subject to alteration when the Finance and Revenue Accounts of the Government of India are finally made up by the Auditor-General.

Surplus revenue

187. The surplus amounted to Rs. 12,19,64,972 or a decrease of Rs. 1,56,10,791 below that of the 1919–20.

Cash balances

188. The year opened with a cash balance of Rs. 395 lakhs in the reserve treasury, the revenue treasuries and the Bank of Madras and its branches. With the inauguration of the Imperial Bank of India during the year the reserve treasury was closed, all the surplus funds being

transferred to the Bank, and an exchange treasury was opened in its place with funds just sufficient to meet transactions relating to the receipts and issues of foreign money, receipts and issues of small coin, etc. The Government balance with the local Head Office of the Bank and its branches is not worked out separately for each Province, the balance for the whole of India being worked out by the Controller of the Currency. The closing balance in the exchange treasury and in the revenue treasuries, other than those managed by a branch of the Imperial Bank, amounted to Rs. 159 lakhs.

(*b*) IMPERIAL REVENUE AND FINANCE

General

189. The receipts on account of Imperial Revenue were less than those of 1919–20 by Rs. 27,01,005. The decrease occurred chiefly under net State Railway earnings (Rs. 95·78 lakhs) and Land Revenue (Rs. 11·37 lakhs), partly counterbalanced by increases under Customs (Rs. 67·13 lakhs) and Income-tax (Rs. 17·66 lakhs). The net transfer from Imperial to Provincial Revenues was Rs. 4,52,534 less than in the previous year. The Imperial expenditure charged to Revenue was also less than that of 1919–20 by Rs. 10,02,556, a decrease of Rs. 28·81 lakhs under Famine Relief being partly counterbalanced by increases of Rs. 10·22 lakhs under Stationery and Printing and of smaller amounts under other heads. The incidence of taxation per head of the population was Rs. 4–10–1 against Rs. 4–7–6·4 in 1919-20.

Land revenue*

190. The receipts from Land Revenue amounted to Rs. 3,44,93,314 or Rs. 11,37,479 less than those of 1919–20. The more important decreases in the district collections were in Bellary (Rs. 2·47 lakhs), Kurnool (Rs. 1·50 lakhs), Tanjore (Rs. 1·23 lakhs), Salem (Rs. 1·23 lakhs), Anantapur (Rs. 1·08 lakhs), Rāmnād (Rs. 0·99 lakh), Vizagapatam (Rs. 0·92 lakh) and South Arcot (Rs. 0·73 lakh). The decreases in Bellary, Kurnool and Anantapur were due to large remissions and suspensions on account of the unfavourable character of the season. Those in Salem and Rāmnād were due to smaller arrear demand at the commencement of the year. The fall in Vizagapatam is for the most part explained by the inclusion in the actuals of 1919–20 of heavy receipts from the sale of waste lands under the Nagavalli project. Damage to crops caused by floods and the fall in the price of groundnut accounted respectively for the decreases in Tanjore and South Arcot. The incidence of taxation per head of the population amounted to Rs. 1–10–8 against Rs. 1–11–6 in 1919–20 and was highest in the district of Kistna and lowest in Vizagapatam. The expenditure under Land Revenue, being entirely Provincial, is dealt with in the Provincial section.

Customs

191. The revenue under Customs is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs, exclusive of import duty on salt which was credited to Salt, amounted to Rs. 1,85,38,529 as against Rs. 1,23,13,886 in 1919–20. The increase of Rs. 62·25 lakhs was chiefly the net result of an increase of Rs. 64·34 lakhs under import duty and a decrease of Rs. 2·49 lakhs under Miscellaneous Revenue. The improvement under import duty was the result of larger collections under liquors, silver manufactures, tobacco, machinery, metals, railway plant and rolling-stock, raw materials and articles mainly unmanufactured, cutlery, hardware, implements and instruments, cotton manufactures and all other articles, wholly or mainly manufactured. The decrease under Miscellaneous Revenue was due to penalties collected in 1919–20 on gold imported in contravention of the prohibitions imposed on the import of gold into British India. The receipts under Land Customs rose from Rs. 5,12,030 to Rs. 10,00,730 owing to heavy penalties collected in gold smuggling cases and to larger imports of kerosene oil from Karikal. The

* The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realizations of opium revenue by the Excise Department) and Income-tax (excluding super-tax and excess profits duty) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Imperial share. But the incidence of taxation has been calculated with reference to the total receipts.

incidence of taxation per head of the population was As. 7–6 against As. 4-11 in 1919-20. The charges amounted to Rs. 6,48,526 as against Rs. 5,09,521 in the previous year, the increase being chiefly due to revision of establishment and temporary additions to pay granted to subordinate establishments.

Opium

192. For information about Opium revenue, see infra under Excise Administration.

Salt

193. The number of salt factories during the year was 84. Although the south-west monsoon was a partial failure, the weather along the coast was distinctly unfavourable for salt manufacture. In most of the subdivisions, manufacturing operations commenced later and scraping closed earlier than usual. In November several of the factories were visited by severe floods which did considerable damage to the works and buildings, and destroyed 51,770 maunds of salt. The quantity of salt manufactured in the year dropped from 15 million maunds to slightly over 12½ million maunds. The stocks on hand at the beginning of the year had been 10 million maunds. Adding to this the quantity manufactured (12½ million maunds) and the quantity imported (1¾ million maunds) the total comes to about 24¼ million maunds. The issues during the year amounted to slightly over 13 million maunds and the balance on hand at the end of the year excluding wastages was over 10½ million maunds, a little less than a year's normal consumption. This increase in the balance of salt on hand in spite of an unfavourable year, brings out the chief feature of the season, viz., the difficulty of securing sales for the salt already manufactured, especially that of 1918–19. Over one lakh of maunds of the older Government salt had actually to be destroyed. The hopes that had been entertained of securing an outlet in the Orissa and Bengal markets were doomed to disappointment, chiefly owing to the renewed imports of foreign salt into Calcutta. The existence of large stocks and a fall in the demand for Madras salt from places outside the Presidency reduced the wholesale prices: and retail prices also fell with the wholesale prices. Of the total quantity of salt manufactured during the year, about 4 million maunds were Government salt and about 8 million maunds were excise salt, as against 5 million maunds and 10 million maunds, respectively, in the previous year. The quantity of duty-paid salt imported by sea from the Bombay Presidency rose from 1,399,252 maunds to 1,520,629 maunds and that imported by rail from Bombay and Goa was 250,714 maunds as against 303,511 maunds in the previous year. The issues for home and inland consumption of locally manufactured and imported salt fell from 12,679,785 maunds to 12,252,769 maunds. The quantity issued for export by sea was 37,090 maunds against 65,278 maunds in the previous year. The quantities issued to the French Government and to the Travancore Darbar were 60,536 and 481,986 maunds, respectively. No salt was taken to Cochin during the year, while 17,700 maunds were taken during the previous year. The quantity of salt issued for fish-curing purposes rose from 252,826 maunds to 296,158 maunds. The year's revenue amounted to Rs. 1,46,12,475 against Rs. 1,51,53,932 in 1919–20 and the decrease was due to larger imports of Bombay salt into the Presidency and to the smaller demand from other Provinces for Madras salt. The incidence of taxation which is calculated with reference to the rate of inland consumption was As. 4–8·3 as against As. 4–10·9 in 1919-20. The charges fell from Rs. 22,36,778 to Rs. 21,94,319, the decrease due to the purchase of a smaller quantity of salt by Government from manufacturers being partly counterbalanced by the increase due to temporary additions to pay granted to subordinate establishments with effect from the 1st April 1920.

Excise* (Abkari)

194. For information about Excise revenue, see infra under Excise Administration.

Stamps

195. The revenue from Stamps amounted to Rs. 90,11,322 against Rs. 94,08,020 in the previous year. The decrease was due to the dullness

* *Vide* footnote under "Land Revenue" on page 82 supra.

of trade, fluctuations in the rate of exchange, less speculation in landed property and decrease of litigation. The incidence of taxation per head fell from As. 7-3·2 to As. 6-9·7. The charges decreased from Rs. 2,89,542 to Rs. 2,40,212.

Income-tax * (excluding super-tax and excess profits duty)

196. The receipts under Income-tax (ordinary) amounted to Rs. 69,99,132 against Rs. 53,46,678 in 1919–20. The increase was mainly due to larger collections on account of the demand of the year as a result of earlier assessments. The incidence of taxation was As. 5-4·9 per head against As. 3-11·9 per head in the previous year. The charges rose from Rs. 74,670 to Rs. 1,74,279 mainly owing to the re-organization of the income-tax department and the appointment of a special staff of Deputy Collectors and Assistant Tahsildars for investigation and assessment work.

Super-tax

197. The collections from Super-tax fell from Rs. 33,99,508 in 1919-20 to Rs. 18,22,520 in 1920–21. Smaller arrear-demand at the commencement of the year owing to the alternative levy of excess profits duty in 1919-20 and late assessments in 1920–21 accounted for the low collections. The incidence of taxation per head was 8·4 pies in 1920–21 against As. 1-3·7 in 1919–20. No special staff was employed during the year for the collection of super-tax.

Excess profits duty

198. The duty was imposed only on the profits of the year 1918–19 but it was not fully realized in 1919–20 owing to late assessments, the grant of extension of time for payment and the stay of collection pending disposal of appeals to the Board of Revenue. The collections in 1920–21 amounted to Rs. 38,32,284 against Rs. 21,42,128 in 1919–20. The incidence of taxation per head was As. 1-5·7 against 9·9 pies in 1919–20. No special staff was employed during the year for the collection of the duty.

Other Imperial receipts

199. Imperial revenue from other sources amounted to Rs. 3,58,18,494 or a decrease of Rs. 94,89,369 as compared with the previous year. The decrease occurred almost entirely under net State Railway receipts (Rs. 95,77,568) due to an increase of about Rs. 104 lakhs in working expenses of both the South Indian Railway and the Madras and Southern Mahratta Railway system owing to larger expenditure on maintenance of permanent ways, etc., and on locomotive expenses, partly counterbalanced by larger traffic receipts.

Transfers between Imperial and Provincial

200. The important variations under the head "Transfers between Imperial and Provincial" were (*a*) the grant of a non-recurring assignment of Rs. 7,21,622 to Provincial Revenues in connection with the revised classification of railway police charges referred to in paragraph 216 of the Administration Report for 1919–20 and (*b*) the payment from Provincial to Imperial revenues of (1) Rs. 12,82,500, in addition to Rs. 6,25,000 paid in 1919–20, on account of the revenue realized in Madras in that year from the enhancement of the rates of income-tax as against Rs. 9,08,000 paid on the same account in 1919–20 for 1918–19 and (2) Rs. 1,76,000 in adjustment of the excess credit afforded to the Provincial Revenues in the accounts of 1919–20 on account of the loss due to the raising of the assessable minimum from Rs. 1,000 to Rs. 2,000.

Expenditure on famine relief †

201. The expenditure on famine relief measures in 1920-21 amounted to Rs. 33,315 against Rs. 29,14,585 in 1919–20 and was incurred chiefly in the districts of Bellary, Cuddapah, Kurnool and Ganjām. For further particulars—vide Chapter IV—Production and Distribution—Weather and Crops.

Other Imperial expenditure

202. The remaining Imperial expenditure amounted to Rs. 1,00,56,641 against Rs. 84,42,627 in 1919–20. The increase occurred chiefly under Stationery and Printing (Rs. 10·22 lakhs), due to the rise in prices of stationery articles specially of paper which had to be purchased in the local market at very high rates owing to the failure of the Indian Mills to supply the requirements in full and under Refunds and Drawbacks due to heavy refunds of income-tax.

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* *Vide* footnote under "Land Revenue" on page 82 supra.

† The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Imperial share.

Capital outlay on State railways and Irrigation works not charged to revenue

203. The capital outlay on State Railways not charged to revenue was Rs. 1,10,03,366 against Rs. 13,40,887 in 1919–20 and that on Irrigation was Rs. 7,59,839 against Rs. 5,30,012 in 1919–20. The increase under State Railways occurred almost wholly under the South Indian Railway and was caused by larger outlay on locomotives, carriages and wagons and on London stores.

Imperial loans

204. The opening balance under Imperial loans on the 1st April 1920 was Rs. 1,87,85,690. During the year Rs. 5,00,000 was advanced to the Madras Corporation and Rs. 3,70,000 to the Madras Port Trust. The repayments amounted to Rs. 4,38,830, the chief items being Rs. 1,51,669 by the Madras Corporation, Rs. 2,13,209 by the Madras Port Trust and Rs. 41,234 by the Tanjore District Board Railway. The closing balance of the year was Rs. 1,92,16,860. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year, viz., Rs. 28,600 was duly paid. On the 31st March 1921, this sinking fund held Government securities of the face value of Rs. 14,97,600.

(c) Revenue and Finance other than Imperial.

Provincial revenues

205. The Provincial accounts opened with a balance of Rs. 2,05,92,771 on the 1st April 1920 and closed with a balance of Rs. 57,92,114 on the 31st March 1921. The transactions of the year resulted in a deficit of Rs. 1,48,00,657 which was the net result of an aggregate revenue of Rs. 9,82,63,227 and an expenditure of Rs. 11,30,63,884.

Land revenue*

206. The receipts from Land Revenue amounted to Rs. 3,44,93,314 and were less than those of 1919–20 by Rs. 11,37,479. The charges were Rs. 1,80,11,009 against Rs. 1,35,76,372 in the previous year. The revision of pay of the Indian Civil Officers with effect from the 1st December 1919, temporary additions to pay granted to subordinate establishments from the 1st April 1920 and the increase of pay and fixed allowance for jamabandi work sanctioned to village establishments with effect from the 1st April 1920 mainly account for the increase.

Stamps, Excise and Income-tax

207. The receipts from Stamps, Excise and Income-tax amounted respectively to Rs. 90,11,322, Rs. 2,71,78,452 † and Rs. 69,99,132 as against Rs. 94,08,020, Rs. 2,68,07,424 and Rs. 53,46,678 in the previous year. The corresponding charges were Rs. 2,40,212, Rs. 12,46,004 ‡ and Rs. 1,74,279 as against Rs. 2,89,541, Rs. 11,28,128 and Rs. 74,671, respectively, in the previous year.

Forests

208. The revenue from Forests amounted to Rs. 53,81,246 against Rs. 62,34,149 in the previous year. The decrease occurred almost equally under the two minor heads "Timber and other produce removed from forests by Government agency" and "Timber and other produce removed from forests by consumers or purchasers." The fall under the first minor head was due to the non-realization of a large portion of sale-proceeds of timber during the year and the absence of the special revenue realized in the previous year owing to the extraction and sale of a large quantity of timber (including sandalwood). A major portion of the decrease under the second minor head was due to the lack of demand for tanning materials, the departmental working of some coupes and the poor yield of avaram and gallnuts. The charges rose from Rs. 36,93,348 in 1919–20 to Rs. 45,30,486. Expenditure on the sawmill at Russellkonda and the felling operations in the Chenat Nayar Forests, the revision of salaries of the controlling staff, the reorganization of the executive and protective staffs

* The receipts from Land Revenue and the receipts and charges under Stamps, Excise (including the realization of opium revenue by the Excise Department) and Income-tax (excluding super-tax and excess profits duty) are shared equally between Imperial and Provincial. The comparison made here is in respect of the Provincial share. But the incidence of taxation has been calculated with reference to the total receipts and is mentioned in the Imperial section.

† Includes the share of opium revenue credited to this head.

‡ Includes expenditure relating to opium charged to this head.

and the grant of temporary additions to pay to subordinate establishments mainly account for the increase.

Registration

209. The receipts under Registration were Rs. 30,68,745 against Rs. 33,24,153 in the preceding year, the decrease of Rs. 2,55,408 occurring mostly under registration fees owing to the instability of the money market and the depression of trade caused by the fall in the rate of exchange. The charges of the department rose from Rs. 16,78,941 to Rs. 20,97,332, the increase being chiefly due to temporary additions to pay granted to subordinate establishments with effect from the 1st April 1920.

Canal revenue

210. The canal revenue collected during the year amounted to Rs. 2,71,268 or Rs. 5,523 less than in the previous year.

Other Provincial receipts *

211. The Provincial receipts under the remaining heads amounted to Rs. 95,61,567 and were higher than those in the previous year by Rs. 15,83,943. There were increases under thirteen heads (+Rs. 18,35,207) and decreases under five heads (— Rs. 2,51,264). The increases occurred chiefly under Civil Works in charge of Civil Officers (+Rs. 4·89 lakhs), Education (+Rs. 4·52 lakhs), Medical (+Rs. 2·77 lakhs), Sanitation (+Rs. 2·02 lakhs) and Miscellaneous revenue (+Rs. 1·76 lakhs) and were mainly due to the refund by local bodies of unspent balances of Provincial grants given to them in previous years. A decrease of Rs. 1·30 lakhs occurred under Scientific and Miscellaneous Departments, which was only nominal, as the actuals of the previous year included Rs. 1·30 lakhs, being refund of unspent balance of funds drawn from the treasury in 1918–19.

Expenditure on famine relief †

212. The expenditure incurred on famine relief measures was Rs. 11,105 in 1920–21 as against Rs. 9,71,528 in the previous year.

Other Provincial expenditure

213. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 8,67,53,457 and was more than that of the previous year by Rs. 99,79,381. Increases amounting in all to Rs. 1,06,87,715 appeared under twenty heads slightly counterbalanced by decreases amounting to Rs. 7,08,334 which appeared under three heads. The more important increases occurred under Police (+Rs. 34·62 lakhs), Courts of Law (+Rs. 19·71 lakhs), Education (+Rs. 10·52 lakhs), Medical (+Rs. 7·47 lakhs), Civil Works in charge of Public Works Officers (+Rs. 7·10 lakhs), Refunds and Drawbacks (+Rs. 6·33 lakhs), General Administration (+Rs. 4·85 lakhs) and Stationery and Printing (+Rs. 4·77 lakhs). The increase under Police was caused by the increase of pay and jamabandi allowance of ryotwari talaiyaris, temporary additions to pay granted to subordinate establishments, increase in the scale of travelling allowance, the introduction of a new uniform for the Madras City Police and the charges on account of the Mahamakham and Pushkaram festivals. The revision of pay of Indian Civil Service Officers introduced in 1919-20 with effect from the 1st December 1919, the revision of pay of officers of the provincial judicial service sanctioned during the year 1920–21 with retrospective effect from the 1st December 1919, the appointment of a Commissioner for the administration of the Agency tracts and the temporary additions to pay granted to subordinate establishments caused the excess under Courts of Law. The increase under Education was due to the revision of pay of the Indian and Provincial Educational Services, temporary additions to pay of subordinate establishments and larger payments of subsidies to local bodies and grants-in-aid. Further transfer of district headquarter hospitals to Government management and larger expenditure incurred on their equipment and under "Diet of patients" mainly account for the increase under Medical. Expenditure on Government House and Penitentiary bridges, larger expenditure under "Civil Buildings," revision of pay of the Imperial Engineering Service and temporary additions to pay granted to subordinate establishments contributed to the increase under Civil Works in charge of Public Works Officers. Heavy refunds of income-tax, rebate sanctioned to forest contractors in the lease amounts of bark contracts for 1919–20,

* Excludes net amount transferred from Imperial to Provincial, which has been dealt with in the Imperial section.

† The charges under this head are shared in the proportion of three-fourths and one-fourth between Imperial and Provincial. The amount of expenditure mentioned here is the Provincial share.

on account of the general fall in the market price of bark and the compensation granted to certain abkāri contractors for losses sustained by them on account of the abnormal rise in the price of jaggery caused the increase under Refunds and Drawbacks. The increase under General Administration was mainly due to the formation of the temporary Reforms Secretariat, expenditure on account of the elections under the Reforms Scheme and charges in connexion with his Royal Highness the Duke of Connaught's visit. The excess under Stationery and Printing was caused by the rise in price of stationery articles, specially of paper, which had to be purchased in the local market at very high rates owing to the failure of the Indian mills to supply the requirements in full and larger expenditure under piecework and day extra establishment of the Government Press. The decrease in expenditure was mostly under Civil Works in charge of Civil Officers (Rs. 5·44 lakhs) and was chiefly due to the payment in 1919–20 of a special grant of Rs. 6 lakhs to District Boards for improvements to important roads.

Provincial loans

214. The Provincial advance and loan account (including loans to local boards for railway construction) opened with a balance of Rs. 1,04,79,956 on the 1st April 1920 and closed with a balance of Rs. 1,09,85,882 on the 31st March 1921 ; advances amounted to Rs. 19,26,502 and repayments to Rs. 14,20,576. Ryots received advances to the extent of Rs. 14,47,303 as against Rs. 15,82,896 in the previous year. The Zamindar of Kangundi received a loan of Rs. 66,000 for the survey of the zamindari. A loan of Rs. 1,00,000 was granted to the South Kanara District Board for the construction of a bridge. The Vellore Municipality borrowed Rs. 85,000 for a drainage scheme. Sums amounting to Rs. 6,700 and Rs. 11,400 were advanced respectively to Chidambaram and Rajahmundry Municipalities for town surveys. Advances of Rs. 17,000, Rs. 3,000 and Rs. 2,500 were made respectively to the Guntūr, Kurnool and Parlākimedi Municipal Councils on account of water-works. The Guntūr Municipality took a loan of Rs. 60,000 for the acquisition of land for town extension. Rs. 1,04,543 was advanced during the year for acquisition of house-sites for Panchamas, of which Rs. 73,727 was repaid, leaving a balance of Rs. 30,816 on the 31st March 1921.

Local funds

215. The following table summarises the transactions of funds raised from special sources and devoted to special objects and not to the general purposes of administration (Imperial and Provincial) :—

Name of the fund.	Opening balance on 1st April 1920.	Receipts, 1920-21.	Charges, 1920-21.	Closing balance on 31st March 1921.	Invested balance at credit of the fund.	Remarks.
	RS.	RS.	RS.	RS.	RS.	
1. Bhadrachalam-Nugur Special Fund	14,614	8,340	9,043	13,911	...	
2. Irrigation Cess Fund ...	63,841	43,651	54,123	53,364	...	
3. Port and Marine Funds— The Madras Port Fund.	21,762	1,61,259	1,65,130	17,891	44,200	
4. The Minor Ports Fund ...	85,044	6,76,006	6,55,071	85,979	2,96,700 (a)	(a) Exclusive of securities pledged with the Imperial Bank.
5. Pilotage Funds (outports).	4,872	15,688	14,284	6,276	1,75,600	
6. Landing and Shipping Funds	3,85,145	6,67,246	5,98,836	4,53,555	5,25,400	
7. The Madras Coast Lights Fund	66,322	2,31,886	1,40,548	1,57,660	...	
8. Cantonment Funds ...	1,19,180	7,06,241	7,23,433	1,01,988	...	The opening balance was transferred to the credit of the Cantonment Funds.
9. Cantonment Hospital Fund	746	...	746	...	...	
10. Civil Hospital Fund, Secunderabad	1,444	99,913	95,608	5,749	...	
11. Light Keepers' Recreation and Benefit Fund ...	...	12,830	7,873	4,957	5,000	A new fund constituted during the year out of the fees levied from visitors to the various lighthouses.
12. University Fee Fund ...	41,206	6,80,866	6,59,553	62,519	1 0,56,800 (b)	(b) Rs. 8,46,800 in Govt. securities, Rs. 75,000 in treasury bills and Rs. 1,35,000 in fixed deposits with the Imperial Bank of India, Madras.
13. Kumbakonam College Hostel Fund	568	16,270	15,686	1,152	...	
14. Mrs. A. V. Narasinga Rao's College Fund	13,730	37,894	37,741	13,883	1,00,000	
15. Hyderabad Residency Bazaar Fund	1,66,440	1,31,552	1,36,002	1,61,990	...	
16. Secunderabad Local (Abkari) Fund	68,155	10,08,917	9,51,858	1,25,214	...	

216. For information about Local Funds constituted under the Local Boards Act, see supra Chapter III—Protection—Local Boards Administration.

MUNICIPAL REVENUES.

217. See supra Chapter III—Protection—Municipal Administration (Mufassal), and Municipal Administration (City of Madras).

EXCISE ADMINISTRATION

[*Report on the administration of the Abkāri Department for the year 1920-21*]

General

218. The Agency tracts of the Ganjām, Vizagapatam and Gōdāvari districts were, with effect from the 1st December 1920, placed under the control of a separate Commissioner and Agent to the Governor : and the abkāri administration of these tracts was also transferred from the officers of the department to the Agency Commissioner. The year was a trying one for those engaged in the administration of excise matters. During the first few months of the period, considerable difficulty was experienced in keeping the arrack shops supplied with liquor, the price of the necessary raw materials having risen so high that several of the Indian distillers found themselves unable to carry out their contracts. The crisis was, however, tided over by the promise of Government help, which finally materialized in the shape of compensation to the extent of Rs. 4·44 lakhs. During the last quarter of the year a wave of temperance enthusiasm swept over certain parts of the Presidency and non-co-operators and temperance workers managed to interfere seriously with the business of the liquor sellers. Pickets were placed around shops and drinkers subjected to various forms of insult and degradation. They were excommunicated from their caste, deprived of the services of barbers and washermen, beaten, garlanded with shoes, tied to poles or driven through the streets on the backs of donkeys with their faces to the tails. These measures were adopted with especial vehemence in the Ceded districts and resulted in a substantial fall in the rentals obtained there for the arrack shops sold in February and March 1921. The policy of Government has always been to minimize temptation to those who do not drink and to discourage excess among those who do ; and to the furtherance of this policy all considerations of revenue are absolutely subordinate. In South India the sources of illicit supply are far more accessible to the regular drinker than in any European country. If the shops are closed, liquor can be had from almost any palm with no more skill than is required to cut an incision or dress a spathe, and no more apparatus than a knife and a toddy pot. In a country where so large a proportion of the lower or labouring class are accustomed to the use of liquor, where every man can (so to speak) have his beer tap in his own back garden and where the extensive topes which cover most of the countryside can immediately take the place of the elaborate breweries of Europe, it is futile to imagine that the closure of shops will have any permanently appreciable effect in stopping recourse to alcohol. It is to be hoped that in the face of these considerations, those who desire to combat the evils of drunkenness by wholesale closure of shops will realize the shortsightedness of the policy they are following and adopt the more radical, if less ostentatious, method of removing the desire for alcohol and not the sources of licit supplies.

Country spirits

219. With the exception of certain Agency tracts, the whole of the Presidency was under the contract distillery system. There was no change in the rates of duty on country spirits during the year. The number of

shops was reduced from 6,046 to 6,008 and consumption fell from 1,988,688 proof gallons to 1,723,868 proof gallons, being 0·04 proof gallon per head of population. The decrease was due to the unfavourable character of the season, depression in trade and latterly to the activities of non-co-operators and temperance workers. The total revenue from country spirits rose, by Rs. 10·65 lakhs, to Rs. 233·17 lakhs.

Toddy

220. The tree-tax system was extended to a few villages in the Chōdavaram and Yellavaram taluks of the Agency division : and free tapping by people other than Koyas was prohibited in the Upper Agency within five miles of the Gōdāvari and three miles of the Sabari. The tree-tax was enhanced by 20 per cent in the Rāmnād and Tinnevelly districts with effect from the 1st October 1920. The number of shops was still further reduced by 262. The total revenue under toddy rose, by Rs. 7·32 lakhs, to Rs. 256·49 lakhs. There was an increase of Rs. 10·75 lakhs under rentals and a fall of Rs. 3·43 lakhs under tree-tax. The number of trees tapped up to July 1921, expressed in terms of coconuts, i.e., taking two coconuts as equal to three palmyras, three dates or one sago tree, was 22·75 lakhs as compared with 24·72 lakhs in 1919–20. The consumption per head was roughly 2·68 gallons against 2·97 gallons in the previous year.

Foreign liquor

221. The duty on both imported and locally-made foreign liquor was raised from Rs. 11–4–0 to Rs. 18–12–0 per proof gallon with effect from the 1st March 1921. The fixed fee for F.L. 2 licences in the Nilgiris was further enhanced from Rs. 500 to Rs. 1,000 and those for hotel licences from Rs. 150 and Rs. 75 for a first and second-class hotel to Rs. 250 and Rs. 150, respectively. The quantity of foreign liquor imported by sea during the year showed an increase of 129,122 gallons due, no doubt, to improved shipping facilities. The quantity of foreign spirits locally manufactured was 37,779 proof gallons against 27,865 proof gallons in the previous year. One brewery ceased working during the year and another confined itself to bottling operations. The total issues of beer from the local breweries fell from 1,323,243 gallons to 626,733 gallons, the export to places outside the Presidency amounting to only 2,706 gallons. This was due to the demobilization of troops and their transfer from this Presidency. The imports from Bangalore amounted to 32,487 gallons. The issues of locally-made rectified spirits increased from 8,069 to 19,784 gallons, due to its replacing the imported article. Foreign liquor is consumed by Europeans and Anglo-Indians and by the more well-to-do classes of Indians. It is not, as a rule, indulged in by the labouring class. There is reason to fear that the use of foreign liquor is spreading among educated Indians and every endeavour is being made to prevent the spread of this taste. The chief step taken in this direction during the year was the reduction in the number of shops licensed by 7.

Intoxicating drugs

222. The ganja wholesale depots were abolished during the year, as they were fruitful sources of malpractices. Shopkeepers have now to obtain their supplies from the two storehouses at Vetapalem and Santavasal or from adjacent shops. The number of shops was reduced to 402, consumption falling from 48,344 seers to 44,735 seers, i.e., from 0·092 tola per head of population to 0·085 tola. The number of cocaine licences increased from 142 to 149, the quantity consumed decreasing, by 11 ounces, to about 60 ounces.

Finance

223. The total abkāri revenue rose from Rs. 255·09 lakhs to Rs. 258·57 lakhs. The incidence of taxation per head of the population was Rs. 1–3–10 against Rs. 1–3–9·8 in the previous year. The charges amounted to Rs. 12·43 lakhs in 1920–21 as compared with Rs. 11·27 lakhs in 1919–20.

Opium

224. The number of shops fell further from 609 to 603. The issues within the Presidency, however, increased slightly from 35,648 seers to 36,239 seers, due chiefly to the occurrence of the important Pushkaram festival at Rajahmundry. The revenue credited to "Opium" and the gain on sale-proceeds credited to "Excise" amounted, respectively, to Rs. 6·21 lakhs and Rs. 8·12 lakhs against Rs. 6·07 lakhs and Rs. 8·21 lakhs in the previous year. The amount of shop-rentals and miscellaneous revenue credited to

"Excise" was Rs. 5·10 lakhs against Rs. 4·77 lakhs in 1919–20. The total opium revenue thus realized by the Excise Department increased from Rs. 19·05 lakhs to Rs. 19·43 lakhs. The incidence of taxation per head of the population was one anna as in the previous year. The charges amounted to Rs. 3,214 and exceeded those of the last year by Rs. 2,522. The average consumption per head was 0·064 tola.

Offences

225. The number of recorded offences against the abkāri laws fell from 15,648 to 14,742, but there is reason to fear that the figures of crime reported do not represent the right proportion of detected to existing crime. Offences relating to "unlicensed possession" numbered 2,642 as against 2,490 in the previous year; the increase under this head was solely due to the drastic reduction in the number of shops, in consequence of which those who needed an intoxicant transport stocked their requirements. The reduction has tended to place the shops in the hands of rich capitalists who employ others to work them. As the middlemen's profits must therefore be larger, attempts have been made to push sales: and devices for breaking the law have been developed into a fine art. The extensive closure of shops in such towns as Vizagapatam, Bezwada, etc., has led to wholesale hawking of liquor through the streets, i.e., to uncontrolled sales in unlicensed premises and by unlicensed persons. Offences relating to opium rose from 189 to 240. The activities of opium smugglers increased considerably owing to the revival of shipping facilities and a number of cases of attempted smuggling involving fairly large quantities of opium—the largest being 45 seers—were detected.

CHAPTER VI

VITAL STATISTICS AND MEDICAL SERVICES.

DETAILS OF CENSUS

226. *Vide* pages 196—205 of the Report on the Administration of the Madras Presidency for the year 1911-12.

BIRTHS AND DEATHS (1920)

[*The fifty-seventh annual report of the Sanitary Commissioner, Madras, 1920; Report on the working of the Births, Deaths and Marriages Registration Act of 1886 in the Madras Presidency during 1920-21: Statistics of British India, Vol. III, Public Health—Vital Statistics*]

Population

227. Excluding the Hill tribes of Ganjām and Vizagapatam and the inhabitants of the Laccadive islands and of the Banganapalle and Pudukkōttai States, the estimated population of the year was 45,242,544. The actual figure at the end of the year was, however, 43,829,678 or 263,257 more than in the previous year.

Registration of vital statistics

228. Registration of births and deaths was compulsory in much the same area as in the previous year. There was a large number of cases of defective registration both in districts and municipalities, giving a totally misleading idea of the health of the areas concerned: and with a view to effecting general improvement in the existing arrangements for the registration of vital statistics, various proposals are now under the consideration of the Sanitary Commissioner.

Births

The total number of births registered in the Presidency was 1,137,238 or 116,025 more than in the previous year, giving a birth-rate of 28·4 per mille as against 25·5 per mille for 1919. This birth-rate was less than that of the decennial average by 2·7 per mille. Excluding Madras district which had a birth-rate of 41·5 per mille against 36·6 per mille in 1919, the highest birth-rate was recorded in Guntūr (36·5). Birth-rates in eight districts ranged between 30 and 36 per mille, the lowest rate (13·3) being returned by Nellore as in the previous year. In the remaining fourteen districts, the rates varied from 23·1 in South Arcot to 28·5 in Salem. Compared with the previous year, all the districts—excepting Nellore and Tanjore, where birth-rates decreased by 2·5 and 1·0 per mille, respectively—showed increased rates. Considered with reference to sex, there were 105·2 male births for every 100 female births, as in the previous year. Muhammadans, as usual, returned the highest birth-rate of 30·8 against 28·6 per mille in 1919. The birth-rate among Indian Christians was 28·3 and among Hindus 28·2, the corresponding rates for 1919 being 25·1 and 25·3, respectively. Compared with the birth-rate in rural areas, viz., 28·2, the rate in municipal towns was higher by 7·0 per mille, probably due to better registration arrangements obtaining therein.

Deaths

The number of deaths registered during the year was 873,981 as against 1,089,829 in 1919. These figures represent annual ratios of 21·8 and 27·2 per mille, respectively, against the decennial average of 25·9 and against the accepted normal death-rate of 33·7 per mille. The decrease was due probably to better health conditions prevailing in the Presidency, but more probably to the fact that a large proportion of the weaklings were killed off during the

influenza epidemics of the previous two years. Madras returned the highest death-rate (41·8 per mille) and Nellore the lowest (12·2 per mille). Compared with 1919, only four districts showed slightly higher death-rates, noticeable falls occurring in Malabar, South Kanara, Ganjām and Madras. Excepting "Plague" the fall in the death-rate was shared by every other head of death causation. Mortality among males was higher during the year than among females, the proportion being 102·2 to 100. Racially considered, the death-rate among Muhammadans was the highest, viz., 22·2 per mille; among Hindus and Indian Christians the rates were 21·9 and 18·9, the corresponding ratios for 1919 for these three communities being 33·3, 27·0 and 22·6 per mille, respectively. Year after year the mortality statistics show a higher death-rate among Muhammadans than among other communities. The reasons for this are under investigation. The infantile death-rate for the districts during the year was lower than that of the previous year. The rate was 161·3 per mille of registered births against 192·9 in 1919. The incidence of infantile mortality was the heaviest in Madras district (282·4) as in several previous years. In rural towns the death-rate fell from 21·5 to 18·1 per mille and in municipal towns from 39·0 to 33·5 per mille. The average infantile mortality in municipalities during 1920 was 228·2 per mille of the registered births against 246·2 in 1919.

Chief diseases

229. Deaths from cholera declined from 93,262 or 2·3 per mille in 1919 to 31,139 or 0·8 per mille in 1920. The disease appeared at one time or another in all districts of the Presidency and existed almost continuously throughout the year in as many as eight districts. In nineteen districts it was a continuation of the epidemic that broke out in the previous year.

Cholera

The incidence of cholera mortality throughout the Presidency was heaviest in the months of January, February and August. The rules issued by Government for combating epidemics of cholera continued to be in operation in all municipal towns and their working was generally satisfactory. There is a tendency on the part of chairmen of municipal councils, however, to delay application of these rules until the epidemic assumes serious dimensions. The eight cholera parties sanctioned for the Presidency were employed during the year in all except six districts. Some of the parties were also engaged in anti-malarial work. On the whole, these parties turned out much useful work. The usual measures were adopted by the parties for combating the spread of the disease. Sir Leonard Roger's method of treatment of cholera by saline injection was attempted in some cases: but there does not seem to be great scope for expansion in this direction as not only is there great disinclination on the part of patients to submit themselves to this treatment, but the conditions under which the treatment has to be attempted make its successful application often utterly impossible.

Smallpox

Smallpox claimed 13,697 victims as against 41,732 in 1919 representing annual ratios of 0·3 and 1·0 per mille, respectively. No district was free from the disease during the year; and in all of them, except the Nilgiris, it was continuously present. Of the deaths registered under this head, 4,737 cases were among infants under one year of age and 4,641 among children between one and ten years of age or 34·6 and 33·9 per cent, respectively, of the total mortality from this cause, against 29·5 and 32·4 per cent in 1919. The incidence of mortality was heaviest between

Plague

January and April 1920. Plague was more prevalent during the year under report than in the two previous years. There were altogether 14,652 deaths against 5,645 in 1919 and 12,859 in 1918, representing annual ratios of 0·4, 0·1 and 0·3 per mille, respectively, against the quinquennial average of 0·3 per mille. Eight districts, however, enjoyed complete immunity from the disease during the year. 324,998 deaths were registered under the elastic heading "fevers" as against 403,499 in 1919,

Fevers

representing annual ratios of 8·1 and 10·1 per mille, respectively, the quinquennial average being 11·0. As compared with 1919, all the districts showed decreased rates except the Ceded districts, where there was an increase, and Nellore, where the rates were the same.

Deaths from dysentery and diarrhœa aggregated 56,402 or 1·4 per mille as against 74,074 or 1·9 per mille in the previous year. The largest number of deaths under the head was registered, as usual, in Madras which gave a mortality rate of 9·2 per mille. Deaths under respiratory diseases fell from 48,984 to 46,987, the mortality rate being however 1·2 per mille as in the previous year. As in several previous years, Madras returned the highest deathrate (8·8 per mille). Deaths under all other causes aggregated 378,169 against 414,188 in 1919, yielding annual ratios of 9·4 and 10·4 per mille, respectively. About 43 per cent of the total mortality in the Presidency during the year was classified under this all-absorbing head.

Dysentery and diarrhœa

Other diseases

230. Among Europeans and Anglo-Indians there were 196 births (83 in Madras City and 113 in the mufassal), and 114 deaths (47 registered in Madras and 67 in the mufassal). The highest mortality was from fever. Diseases of the heart, pneumonia, diarrhœa and dysentery also claimed many victims. Baptisms and burials for which returns were received by the Registrar-General of Births, Deaths and Marriages numbered 1,326 and 786, respectively, as against 1,202 and 929 in the previous year. The number of licences in force under the Indian Christian Marriage Act, 1872, was 753 or 19 more than in the previous year, and the number of marriages contracted by European Christians fell from 419 to 391.

Europeans and Anglo-Indians

EMIGRATION AND IMMIGRATION (1920)

[*G.O. No. 771, Development, dated the 9th May 1921 ; Statistics of British India, Vol. IV, Administrative, etc.—Emigration*]

231. No indentured emigration took place during the year to the West Indies and Fiji, as the prohibition imposed by Government in 1917 remained in force. Seven hundred and seventy-seven emigrants returned from Natal in two ships. There was no emigration to the French Colonies.

Regulated

232. The number of passengers to the Straits Settlements decreased from 106,509 to 96,128. The decrease was due to stagnation in the rubber industry. The number of passengers to Burma showed an increase of 54,332, and that to Ceylon a fall of 47,418 : but it is impossible to differentiate emigrants who go to settle from other passengers who cross to and fro frequently. The increase in the number of passengers to Burma was due to the high price of foodgrains locally, to the increased rate of wages which the labourers got in Burma and to improved shipping facilities to Rangoon. The decrease in departures to Ceylon was ascribed to the reduced demand for labourers owing to the reduction in the area cultivated for tea and rubber in that colony. The number of persons recorded as having taken passages to ports outside the Presidency but within British India was 14,729 against 11,192 in the previous year. The great majority of these consisted, as usual, of passengers from South Kanara to Bombay coast ports. The number of persons who returned from Burma increased, by 33,843, to 88,820. This was the natural consequence of the increase in departures to that province, aided by a more regular steamer service to and fro from Rangoon. The arrivals from Ceylon were practically the same as in the previous year. The number of persons who returned from the Straits Settlements increased, by 12,714, to 47,405. This was attributed to the curtailment of the labour force on rubber estates.

Non-regulated

MEDICAL RELIEF (1920)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1920; Statistics of British India, Vol. III, Public Health—Hospitals*]

Medical institutions

233. The number of medical institutions of all classes at the end of the year was 737 or 7 more than in the previous year, of which 44 or 4 more than in 1919 were for women and children. Forty-four public hospitals or 8 more than in the previous year were maintained by the State, of which 4 as against 2 in 1919 served women and children. Local funds maintained 517 dispensaries or an increase of 5 over the previous year's figure, of which 20 were for women and children. Eighty-three institutions or 3 more than in the preceding year were maintained by private agencies and, of these, 29 received State aid. The number of railway hospitals continued to be 47, while the number of State institutions maintained for the benefit of special departments decreased from 55 to 46. Five headquarter hospitals were taken over by the Government during the year.

Relief

234. The total number of patients treated in the State-public, Local fund and private-aided institutions increased, by 254,905, to 7,798,472. The increase was shared by all classes except Europeans and Anglo-Indians in whose case the number treated showed a decrease of 5,406. The number of in-patients rose, by 1,859, to 125,910, and that of out-patients, by 253,046, to 7,672,562. The number of patients represented by friends remained practically the same as in the previous year, viz., 3·62 lakhs. Of the in-patients treated 75,296 were cured, 24,602 relieved, 15,679 were discharged otherwise and 6,275 died showing a death-rate of 4·98 as against 5·66 in the previous year ; 10,193 were treated for injuries, 13,993 for diseases of the digestive system, 7,382 for diseases of the eye, 7,029 for malaria and 4,985 for all other general diseases. The number of beds available was 4,110 for men and 3,250 for women. In the case of out-patients the daily average decreased by about one-ninth of the last year's figure, indicating thereby that the average duration of stay of each patient in the hospital diminished. The diseases in the order of their greatest prevalence in the out-patients' department were those of the digestive system, of the skin, of the eye, of the ear, of the respiratory system, all other general diseases, injuries, malaria, and rheumatic fever and rheumatism. The total number of operations performed on 296,637 patients was 302,384, of which 21,537 were returned as really major. In State-special and railway dispensaries the number of in-patients decreased by 1,267 to 8,682, whereas that of out-patients increased by 7,739 to 283,324. In private non-aided institutions the number of in-patients fell from 15,985 to 14,148 and that of out-patients from 361,384 to 357,877.

Finance

235. The total receipts during the year amounted to Rs. 52·48 lakhs as compared with Rs. 43·56 lakhs in the previous year : and out of this increase of nearly Rs. 9 lakhs, the Government alone contributed more than Rs. 7 lakhs. The total expenditure rose, by Rs. 8·90 lakhs, to Rs. 52·28 lakhs.

Madras Medical College (1920-21)

236. The eighty-sixth session of the Madras Medical College commenced on the 2nd July 1920 and terminated on the 31st March 1921. There were 579 students on the rolls of the institution as against 523 in the previous year. The number of women students showed a further increase from 47 to 53. The number of students who were attending the University classes was 365 or 24 more than in the previous year, of whom 25 or 4 more than in the previous year, were women students. There was an increase from 48 to 51·1 in the percentage of passes at all the University examinations. The percentage of failures in the final examination was less in medicine and midwifery and greater in surgery, as compared with the previous year. In the Apothecary department, the number of new admissions showed a further decrease. There were no applicants during the year

for the B.S.Sc. and second-class Health Officers' classes. The post-graduate course for sub-assistant surgeons which was temporarily suspended on account of the war was revived. The new post-graduate courses for civil assistant surgeons in lieu of the septennial promotion examinations were commenced for the first time. A second batch of civil assistant surgeons and sub-assistant surgeons underwent a course of training in dental surgery. The students were kept up to date as regards physical training and they were, as usual, keen on athletics. There were 375 accessions to the College Library.

Medical Schools (1920–21)

237. There were 1,183 students on the rolls of the Medical Schools at Rāyapuram, Tanjore, Vizagapatam, Calicut and Madura, as against 1,091 in the previous year, of whom private students totalled 665 or 131 more than in 1919–20. As a result of a change in the school term from July-June to January-December, there were no admissions to the schools in July 1920, but only in January 1921 ; the school term previously in vogue has, however, been re-adopted. For the final Board examination held during the year for the diploma of L.M.P., 219 students appeared from the Medical Schools of Rāyapuram, Tanjore, Vizagapatam and Madura and 115 passed ; the corresponding figures for the previous year being 181 and 80, respectively. There was no final-year class in the Calicut school and the passed third-year students were, as usual, transferred to the continuation Medical School at Madura to complete their studies ; the question of opening the final-year class was under consideration and the school continued to be held in a wing of the School of Commerce, Calicut. The Madura school was temporarily located in the Police hospital buildings which fell vacant on the amalgamation of the Police hospital with the Government headquarter hospital at that place. The new buildings under construction at Tanjore were nearly completed in December 1920, and were taken over for the school with the exception of the chemical laboratory ; the construction of a hostel for the students attached to the school was also sanctioned. An increased allotment of Rs. 2,000 was made to the Rāyapuram school library. Now that an improved time-scale of pay ranging from Rs. 75 to Rs. 200 has been sanctioned for sub-assistant surgeons, it is hoped that students of the proper type will come forward in increasing numbers to undergo training in these schools. The receipts of the five medical schools amounted to Rs. 0·47 lakh and the expenditure to Rs. 3·22 lakhs as against Rs. 0·36 lakh and Rs. 3·20 lakhs, respectively, in the previous year.

THE PASTEUR INSTITUTE, COONOOR

(1ST MARCH 1920 TO 28TH FEBRUARY 1921)

[*The Annual Report of the Director of the Pasteur Institute of Southern India, Coonoor, 1921*]

238. The number of patients who underwent a full course of treatment rose further, by 451, to 3,623. This increase was entirely among Asiatics. Three patients died during the course of treatment from hydrophobia, two from pneumonia and one from enterica ; six died less than 15 days from the date of completion of treatment and 18, more than 15 days after the completion of treatment. The last, classed as failures, formed 0·49 per cent as against 0·80 per cent in the previous year. There were in addition 75 patients who, for various reasons, did not complete the full course of treatment. At the close of the year, 136 patients remained under treatment. 145 persons were given advice but not treated. The virus was in its 747th passage on the 28th February 1921. A fair amount of original work was carried out in the laboratory. The net receipts, excluding refunds of advances and sale of securities, amounted

to Rs. 40,546 and the net payments to Rs. 40,281. The latter excludes a sum of Rs. 50,374 paid on account of new buildings, which were erected to meet the requirements of the increasing number of patients and of the medical staff of the Institute.

LUNATIC ASYLUMS (1920)

[*G.O. No. 990, Local Self-Government (Public Health) Department, dated the 13th August 1921; Statistics of British India, Vol. III, Public Health—Lunatic Asylums*]

239. There was accommodation for 1,038 insanes in the three asylums at Madras, Vizagapatam and Calicut as against 1,026 in the previous year. The total number of lunatics under treatment in all the three asylums at the end of the year was 892 and the daily average strength 895 as compared with 875 and 906, respectively, in the previous year. Of these, females numbered 221 or two less than in the previous year. The year's admissions including re-admissions and observation cases rose from 325 to 340. Three male patients were admitted as voluntary boarders. The causes of insanity in the order of frequency were stress and strain, both mental and physical, and heredity. The total number of criminals treated was 195 as against 224 in 1919. There was a further fall in the daily average sick for the three asylums from 81 to 71 and the percentage of cured to daily average strength was nearly the same as last year. The principal diseases treated were dysentery, influenza, diarrhœa, and tubercle in the lung. Deaths decreased from 127 to 121. Dysentery claimed the largest number of deaths, tubercle coming next. Regular inspections of the asylums were made by both officials and non-officials. The receipts from paying patients further increased from Rs. 25,510 to Rs. 28,061. Excluding remittances to the treasury and the value of stores on hand, the total expenditure during the year amounted to Rs. 3·33 lakhs as against Rs. 2·34 lakhs in the previous year. The Superintendents are endeavouring their best to see that the living of the inmates in the asylums is pleasant, that the inmates have facilities for recreation and that their food is wholesome, well cooked and well served. In Calicut, a special feature of the year was the experiment made by employing a keeper to teach the three "R's" to a selected number of patients, and some were made to learn by heart passages in English poetry and also poems in Malayalam.

SANITATION (1920)

[*Annual Reports of the Sanitary Commissioner and of the Sanitary Engineer for 1920*]

Municipalities

240. The district municipalities continued to be administered under Act IV of 1884 till October 1920, when the new District Municipalities Act V of 1920 was introduced. Many of the legal disabilities which hampered the progress of sanitation under the old Act have been removed by the new Act and it is hoped that, with the enhanced powers with which Municipal Councils are now armed, sanitary measures will be enforced with greater vigour and energy. There were 81 municipalities in the Presidency, of which only 29 had the benefit of a protected water-supply. No new water-works were opened during the year, but two sanctioned schemes proceeded to execution, viz., improvement to the Tanjore and Salem water-supplies. There was no system of drainage anywhere except Ootacamund and conditions were very unsatisfactory in all municipalities. Cess-pools, earthen-drains and bits of isolated masonry drains constructed without any regard to levels or out-falls were the usual means employed

for the disposal of sullage. There was an all-round increase in the superior and menial staffs employed during the year as compared with 1919, although in individual municipalities there were serious deficiencies in this respect. The scheme for employing Health Officers made no progress, and nightsoil conservancy was extremely defective in most municipalities. There was also a slight reduction in the conservancy plant, but the fall in number of nightsoil carts was the greatest. Carts of approved patterns were rather the exception than the rule. Public latrine accommodation was also very inadequate in many municipalities, the increase in the number of such latrines being only 47 during the year. The number of private latrines totalled 164,401 against 161,498 in 1919 or an increase of only 1·7 per cent ; of these 145,091, as compared with 143,641, were conserved by municipal agencies, an increase of only one per cent. Efforts to extend the private scavenging service did not, therefore, keep pace with the increase of private latrines. Over 60 per cent of the class of houses that should possess private latrines were without this convenience and Municipal Councils were not energetic in removing the defect by enforcing the salutary provisions of the Municipal Act in this respect. The allotment for 1920-21 on account of sanitation was Rs. 34·18 lakhs and the expenditure for 9 months, for which information is available, amounted to Rs. 24·57 lakhs. Of the total allotment conservancy absorbed Rs. 17·70 lakhs and water-supply Rs. 5·35 lakhs, the expenditure under these heads being Rs. 13·51 lakhs and Rs. 4·27 lakhs, respectively. The balance was devoted to the construction and repair of drains, markets, slaughter-houses, latrines, the improvement of town-sites, fairs and festivals. Conditions in rural areas, as regards water-supply and drainage, continued to be unsatisfactory. With the exception of Rāmēswaram, no locality enjoyed the benefits of a complete water-supply system, although several schemes were under investigation. No drainage schemes were undertaken during the year, the chief obstacle being the paucity of funds. As in previous years, conservancy made no progress worth recording on account of the financial stringency. It is hoped that, with the advent of District Health Committees and the formation of a District Health Service, better results will be possible. Conservancy arrangements existed in 1,200 union and non-union villages—a retrogression as compared with the previous year. The proportion of conserved villages to the total number of villages was only 2·3 per cent. Out of the total sanctioned allotment of Rs. 15·07 lakhs, a sum of Rs. 4·78 lakhs was spent on conservancy and Rs. 1·55 lakhs on water-supply. The balance was utilized in connexion with improvements to drains, markets, slaughter-houses and others. The old Local Boards Act V of 1884 was repealed by Act XIV of 1920, which came into operation on the 1st April 1921 and it is hoped that local boards will make free use of it in the matter of sanitation.

District boards

VACCINATION (1920-21)

[*Annual Report on Vaccination in the Madras Presidency and on the work of the Vaccine Section of the King Institute of Preventive Medicine, Guindy, for the year 1920-21 ; Statistics of British India, Vol. III, Public Health—Vaccination*]

241. The usual lanolinated vaccine was issued throughout the year with the exception of the two months, July and August, when an attempt was made to manufacture and issue chloroformed glycerine lymph for the whole Presidency. The result was most unfortunate, as the success rate for these two months dropped appreciably. The percentage of success obtained with lanoline lymph in local fund areas and municipalities was 65·5 and 77·0 respectively, while that obtained with glycerine lymph for the same areas were 31·3 and 88·2 respectively. The failure of the chloroformed glycerine lymph was due to its preparation during June, July and

August—the worst months of the year for the purpose. The total quantity of vaccine supplied during the year by the King Institute, Guindy, was 2,054,075 cases, or a decrease of 34,610 cases as compared with that of last year. The fall was mainly under supplies made to the Military department and to municipalities. The cessation of recruitment in consequence of the termination of the recent war, was responsible for the decreased supply to the Military. The causes that led to the fall under municipalities are under separate investigation. Madras City continued to be supplied with glycerine vaccine as in previous years. During the year one additional vaccination range called the Amalapur range in the Gōdāvari district was formed. Great difficulty was experienced in filling up posts of vaccinators and the result was that in several localities the full complement of vaccinators was not employed. The new scheme of vaccination introduced in 1918, under which a staff of superior vaccinators and deputy inspectors was employed and the work of verification was undertaken by deputy inspectors instead of by vaccinators was in operation during the year throughout the Presidency with the exception of two of the Hill Tract ranges in the Ganjām district. A scheme for the better training of first and second-class vaccinators was approved by the Government. The total number of vaccinations during the year was 1,568,270 or 45,347 less than in the previous year, the fall occurring under revaccination. The decrease was due, among others, to the deficiency in the complement of vaccinators, the absence or decreased prevalence of smallpox, the large wastage in the glycerine lymph supplied in July and August 1920 owing to inexperience in its use, the deputation of a large number of the vaccination staff for the conduct of census operations, the reduction in the minimum out-turn originally prescribed for vaccinators in certain districts and the prevalence of plague and occurrence of floods in certain districts. Both primary vaccination and re-vaccination showed a regrettable decline in the percentage of success during the year. Compared with the previous year, the decrease under primary vaccination amounted to 16·7 per cent and under re-vaccination to 11·8 per cent. This was partly due to deterioration in the quality of the vaccine lymph manufactured at the King Institute, Guindy, and partly to the temporary substitution of glycerine vaccine ; a scheme for improved methods of lymph manufacture and storage is under consideration of Government. There was also a decrease of 55,528 in the number of children successfully vaccinated under one year of age. 153,594 operations were performed in municipalities during the year against 159,764 in the year preceding. Municipal vaccination received little or no attention and the supervision of vaccinators connected therewith left much to be desired. Among municipalities where primary vaccination is compulsory, marked decreases occurred in 18 centres. There were 12,091 deaths from smallpox as against 40,592 in the previous year. The total cost of the department increased from Rs. 4·80 lakhs to Rs. 5·43 lakhs and the average cost of each successful case from As. 7–4 to As. 10–8. The increased cost was due to the low percentage of success obtained during the year and to the grant of temporary increases of pay to the subordinate staff.

CHAPTER VII

INSTRUCTION.

GENERAL SYSTEM OF PUBLIC INSTRUCTION

242. *Vide* pages 213 to 228 of the report on the administration of the Madras Presidency for the year 1911-12.

EDUCATION (1920-21)

[*Report on Public Instruction in the Madras Presidency for the year 1920-21 ; Statistics of British India, Vol. V, Education*]

Administrative events of the year

243. A considerable expansion of educational activity occurred during the year which was evidenced. among other things, by the increase in the number of inspectorates, the increase in the number of schools, the passing of the Madras Elementary Education Act and the creation of the Ministry for Education under the Government of India Act. Three additional Inspectors' circles were created as an *ad interim* measure and the jurisdiction of Inspectresses of Girls' Schools was reduced by the creation of one more Inspectress. The permanent retention of the posts of the additional Deputy Director and the Deputy Directress was sanctioned and a time-scale was introduced for the Women's Branch of the Madras Educational service. In conformity with the recommendations of the Royal Commission on the Public Services in India, the Government appointed a committee of five persons to advise on the selection of candidates for direct recruitment to the higher branches of the Educational Service : and thirteen posts were transferred from the Madras Educational Service to the Indian Educational Service, with a view to organize the latter into two classes (Administrative and Collegiate) on the basis of the work to be done. In consequence of a discussion in the Madras Legislative Council and of a subsequent inquiry that was made, the Government sanctioned an amendment of rule 102 of the Madras Educational Rules so as to make the grant of half-fee concessions admissible thereunder in schools under public management, compulsory in the case of poor pupils belonging to backward classes. The control of the School of Arts, Madras, was transferred to the Department of Industries. The Municipal High School, Anantapur, having deteriorated considerably in recent years, it was taken under Government control temporarily for a period of three years ; the net cost of the maintenance of this school is met from Provincial funds. The public were latterly taking a keener interest in educational affairs. Non-co-operation had little effect on the student population of the Presidency. The highest number of pupils reported to have left secondary schools and colleges at any one time on that account was only 820. The chief districts affected in this respect were Kistna, Malabar, South Kanara, Guntūr and Nellore.

General statistics

244. The number of public institutions rose by 1,607 to 35,895 and their strength by 66,200 to 1,692,000, the increases representing 4·7 per cent and 4·1 per cent, respectively, as against 4·3 per cent and 2·7 per cent in the previous year. This increase was shared by all classes of schools but more especially by elementary schools. Private institutions also increased

by 1·8 per cent in number and 3·1 per cent in strength. Taking the institutions of all classes and grades together, there was an accession of 1,676 to their number and 69,810 to their strength. The percentage of those under instruction to the whole population was 4·4 against 4·2 in the previous year, the increase occurring almost entirely in the case of boys, 7·0 against 6·7.

University and collegiate education

245. The committee appointed to consider and report on the changes desirable in the University Acts and Regulations in view of the recommendations of the Calcutta University Commission, presented its report to the Senate during the year. The University secured the copyright of all manuscripts of the mathematician, the late Mr. S. Ramanujam. Owing to the opening of the Venkatagiri Raja's College, Nellore, and the Sri Meenatchi College, Chidambaram, the number of Arts colleges increased by two. Oriental colleges numbered 13 or one more than in 1919-20. The Government Muhammadan College, Madras, was raised to the first-grade, the college being affiliated in Group VI Languages (Arabic and Persian) for the B.A. Degree Examination. The Ceded Districts College, Anantapur, was granted further affiliation in Group VI Languages with Sanskrit as the main language for the B.A. Degree Examination. The Government College, Mangalore, was affiliated in Group II, Natural Science, Physics and Chemistry of the Intermediate course. The total number of students in all the colleges for men and women fell from 8,230 to 7,580 and this decrease was largely due to the introduction of October examinations, which several students passed, and also to a small extent to the non-co-operation movement. There were in all 383 honours students as against 391 in the previous year. There were 20 second-grade colleges or one more than in the previous year and the total number of students reading in them was 1,720. In the four professional colleges under departmental control, the strength further fell from 1,292 to 1,138 ; this decrease is mainly accounted for by a fall in the number of students who passed the F.L. Examination as also by the opening of the School of Engineering at Trichinopoly and the abolition of the upper subordinate class in the College of Engineering consequent on the introduction of the scheme relating to the re-organization of the Public Works Department.

Secondary education

246. The number of public secondary schools for Indian boys rose from 427 to 467. Out of the 45 schools newly opened, 35 were under the management of Local Boards, 2 under Municipal management and 8 under private management. The total strength of these schools rose by 3,482 to 152,404. Of this number 1,957 were girls as against 1,773 in 1919-20. The number of teachers employed advanced from 6,576 to 7,020. There was again a further increase in the number of candidates for the public examination under the Secondary School-Leaving Certificate Scheme. The total expenditure on secondary schools for Indian boys increased by Rs. 9·27 lakhs to Rs. 54·79 lakhs, to which public funds contributed 22 per cent, fees 63 per cent and other sources 15 per cent. The average cost of educating each pupil was Rs. 35·5 and each pupil paid an average fee of Rs. 22. With a view to assist managers of schools under private management to increase the pay of some of their teachers, the Government sanctioned a special grant of one lakh of rupees for distribution among aided secondary schools for Indian boys.

Elementary education

247. The number of public elementary schools for Indian boys increased by 1,493 to 32,482 and their strength by 57,526 to 1,326,539. The percentage of male pupils to the male population rose slightly from 5·4 to 5·7. The total number of teachers employed in public schools increased by 2,613 to 56,515 and the number of trained teachers by 1,857 to 21,266. The percentage of trained teachers to the total number of teachers employed also increased from 36 to 38. During the year 472 buildings were constructed for the accommodation of public elementary schools for boys, of which 102 were for schools under public management. The total expenditure on these schools rose from Rs. 74 lakhs to Rs. 86·4 lakhs towards which public funds contributed 75 per cent, fees 9 per cent and

other sources 16 per cent. The average cost per pupil rose further from Rs. 5-15-3 to Rs. 6-10-3.

Special education

248. The most important feature in special education was the arrangement made for providing a large number of trained teachers who are a necessary preliminary to the expansion of elementary education which is contemplated in the passing of the Elementary Education Act of 1920. The number of Government training schools for masters rose from 55 to 71 and their strength from 4,251 to 5,659. There was no increase in the number of aided training schools. On the 31st March 1921, there were 6,392 students receiving instruction of a technical character as compared with 5,565 in the previous year. Of the former, 660 were pursuing art education, 1,656 technical education in engineering subjects and telegraphy, 1,816 industrial education including agriculture, and 2,260 commercial education.

Female education

249. The number of schools solely intended for Indian girls rose from 2,563 to 2,599 and their strength, by 10,223, to 370,966. The number of women under instruction in the colleges for women rose from 241 to 267, the Queen Mary's College alone contributing 69 per cent towards the increase. There was also an increase in the number of students reading in colleges for men, from 29 to 35. The number of public secondary schools for girls rose, by 7, to 51 and their strength was 8,874. The number of girls in secondary schools for boys was 1,957 as against 1,773 in the previous year, thus making a grand total of 10,831 girls receiving secondary education. The number of public elementary schools for girls rose, by 36, to 2,403 and their strength, by 1.467, to 156,756. The number of women under training rose by 287 or, 25·5 per cent, to 1,414. The results in the Training School-Leaving Certificate examination were excellent in the secondary grade, there being no failures at all, while the percentage of passes in the elementary grade was 57. There was an increase of Rs. 3·2 lakhs in the expenditure on secondary and elementary schools for Indian girls as against Rs. 3·5 lakhs in the previous year. A special grant of Rs. 0·15 lakh was distributed among managers of aided secondary schools for girls to enable them to raise the pay of teachers employed therein.

European education

250. The total number of European institutions fell from 92 to 91 owing to the closure of the Railway School, Donakonda. The total strength rose by 281 to 9,387, while the number of teachers employed fell by 4 to 689. Of the latter 509 held professional certificates against 508 in the previous year. One hundred and ninety-six candidates appeared for the European High School Examination, and 129 passed. For the Middle School Examination 310 appeared and 213 passed and for the Primary Scholarship Examination 80 appeared and 53 passed. The total expenditure rose from Rs. 16·68 lakhs to Rs. 20·03 lakhs towards which public funds contributed 34 per cent, fees 18 per cent and other sources 48 per cent; the increase was mainly due to the enhanced expenditure of Rs. 1·30 lakhs on High and Middle schools, Rs. 0·78 lakh on buildings and Rs. 1·02 lakhs on hostels (boarding charges).

Education of Muhammadans

251. There was a slight increase in the number of public institutions intended for Muhammadans (from 1,983 to 1,991), but their strength decreased by 4,420 to 114,014. This decrease was mainly in elementary schools and it was due to the opening of several unrecognized schools under private management, one feature of the Khilafat movement. The Government Muhammadan Middle school at Kurnool was raised to the status of a High School. In Arts Colleges there were 138 Muhammadan students or 24 less than in the previous year, while the number of Muhammadan pupils in secondary schools for Indians rose, by 237, to 8,210. In the eight training schools for masters and the three for mistresses, 366 and 54 students, respectively, were under training. The total number of public schools intended for Mappillas rose from 558 to 571. The expenditure on Muhammadan and Mappilla schools rose from Rs. 9·91 lakhs to Rs. 11·48 lakhs towards which public funds contributed 77 per cent, fees 6 per cent and other sources 17 per cent.

Education of backward classes and others

252. The number of public institutions intended for Panchamas rose, by 569, to 7,007 and their strength, by 18,478, to 193,260. The total number of Panchama scholars in public schools in the different stages of instruction rose by 10,412 boys and 1,518 girls. This increase was shared by all classes of schools. The number of schools intended for aboriginal and hill tribes in the Agency tracts rose, by 48, to 324 and their strength, by 8,980, to 19,312. Of this number 5,339 belonged to hill tribes. The total number of aboriginal pupils in all classes of schools in the Agency tracts rose from 6,259 to 7,228. There were 13 schools exclusively working for the benefit of these tribes in the Kurnool district and 47 schools on the Nilgiris. In the Presidency, as a whole, the total number of pupils belonging to the aboriginal classes was 11,640 (10,722 boys and 918 girls) as against 9,096 (8,186 boys and 910 girls) in the previous year. The scholarships and fee remissions available for the special benefit of Panchamas and other boys belonging to the aboriginal and criminal tribes studying in secondary schools were almost fully utilized. The schools for blind and deaf mutes at Palamcottah, Mylapore and Rentachintala continued to do good work.

Finance

253. The total expenditure on education rose from Rs. 266·69 lakhs to Rs. 319·09 lakhs, i.e., by Rs. 52·40 lakhs as against Rs. 18·5 lakhs in 1919–20. To this increase public funds contributed 63 per cent and private funds 37 per cent, the corresponding percentages for the previous year being 73 and 27, respectively. The total direct expenditure rose from Rs. 192·8 lakhs to Rs. 228·8 lakhs, while indirect expenditure increased from Rs. 74 lakhs to Rs. 90 lakhs. The recurring Imperial assignments which were available during the year were almost entirely spent. Out of the Imperial non-recurring grant of Rs. 49 lakhs made in 1912–13 for education in general, a sum of Rs. 1·04 lakhs was spent in connexion with Government educational buildings and building grants to aided European schools.

REFORMATORY SCHOOL, CHINGLEPUT (1920)

[*Statistics of British India, Vol. IV, Administrative, Judicial, etc., Jails*]

254. The average strength of the Reformatory School, Chingleput, was 239 as against 247 in the previous year. The number of admissions fell from 76 to 53. Of these 24 had no previous conviction, 23 had one each and 5 had more than one conviction. Thirty-six boys were discharged after their due periods of detention. There were eight special discharges on account of disease and overage and an equal number were sent out on licence to the military and other Government departments. There were four escapes during the year and all were recaptured. The sanitation of the school premises and its surroundings was carefully attended to. Malaria was more prevalent than in the previous year and anti-malarial measures were carried out by a special staff of qualified men ; the boys also underwent several courses of thymol treatment. The total number of in-patients in the hospital was 194 as against 230 in the previous year. The monitorial system worked fairly well and it helped in maintaining discipline, which on the whole was satisfactory. The number of punishments decreased from 70 to 42. The total earnings of the boys during the year were Rs. 1,133 or slightly less than in the previous year. The religious and moral tone of the boys received careful attention and a sense of honesty was awakened in them with gratifying results. Twenty-three boys were sent up for the Elementary School-Leaving Certificate examination, of whom 16 obtained "good" certificates, 6 "fair" and one a "poor" certificate. For the Government Technical Examinations 19 candidates in all appeared and 15 passed. The boys were good at sports and won a number of prizes. Simple vernacular books were added during the year to the library. Deducting the sale-proceeds, the net expenditure was Rs. 0·54 lakh as against Rs. 0·50 lakh in the previous year. Reports received in respect of 174 ex-pupils showed that 123 or 71 per cent of them bore a good character and that two were prosecuting higher studies.

MISCELLANEOUS (1920-21)

Government Examinations

255. All the usual examinations, and in addition, the Examination for the award of certificates of competency to persons qualified to teach in schools for physically defective (blind, deaf and dumb) children and the Women's Secondary Grade Final Examination, which were newly instituted, and the Technical Teachers' Certificate Examinations and the Examination for Teachers' Certificates in drill and gymnastics, the conduct of which was for the first time transferred to the Commissioner for Government Examinations, were held during the year. The Examination in connexion with the Subordinate Medical Department was not held, it having been decided that candidates for admission to medical schools should be selected by a Board convened or appointed by the Surgeon-General with the Government of Madras instead of by means of a competitive examination conducted by the Commissioner for Government Examinations. All the examinations were held at several centres within, and some of them at a few places outside, the Presidency. In connexion with the Examination for the award of certificates of competency to persons qualified to teach in schools for physically defective children, nine certificates were awarded during the year to candidates belonging to the deaf and dumb school at Palamcottah. For the Women's Secondary Grade Final Examination, which is open to all women without any restriction as regards age or attendance at school, 27 candidates registered their names and one less appeared. The Technical Teachers' Certificate Examinations were conducted at 7 centres ; 79 candidates appeared and 52 passed ; three of the examinees were women, all of whom were successful. Of the 137 candidates registered for the examination for Teachers' Certificates in drill and gymnastics, 131 were examined and 105 declared to have passed. Ten thousand nine hundred and sixty-two individual and 12,133 subject candidates against 10,163 and 11,827, respectively, in the previous year appeared for Technical Examinations. The results were better than those in 1919-20 in the case of the elementary grade. The subject candidates included five women for the advanced, 124 for the intermediate and 481 for the elementary grade, of whom, 3, 71 and 240, respectively, were successful. Three of the women candidates for the intermediate grade appeared for the examination in cotton-weaving and all of them passed. Twelve diplomas, eight of which were for commerce, and 151 group certificates, among which there were four for bridge construction, four for machine construction and five for Hydraulic Engineering, were issued during the year. The silver medal of the Madras Musical Association was not awarded, as no candidate appeared for the Elementary examination in Music. A committee of experts was constituted during the year to revise the scheme of Technical Examinations as regards subjects, grades and syllabuses relating to the subjects to be retained. For the special test examinations, 3,057 candidates in all registered their names and 2,364 appeared ; 1,267 came out successful. The numbers that were registered and examined and that passed during the previous year were 2,919, 2,270 and 1,301, respectively. The percentages of passes in the Translation and Criminal Judicial Tests were 66 and 69, respectively ; and the results in the Account, Civil Judicial and Jail Tests were better than those of the previous year. The lowest percentage of passes was in the Revenue Test. The results were generally good, but the percentage of success fell on the whole from 57·31 to 53·59. The receipts rose from Rs. 2·16 lakhs to Rs. 2·30 lakhs, while the expenditure fell from Rs. 1·98 lakhs to 1·96 lakhs.

Special tests

Finance.

Lawrence Memorial School*

256. The most important event in the school year was the presentation of colours to the school by His Royal Highness the Duke of Connaught on the 15th January 1921. A sum of Rs. 32,000 was received as a special donation from His Excellency the Viceroy. The Principal proceeded to Simla in April 1920 in connexion with the proposed

* The Government having directed that annual reports should, in future, be for the official year and not as hitherto for the calendar year, the report under review was drawn up so as to cover the period from the 1st January 1920 to the 31st March 1921.

provincialization of the school. Classes for Cambridge Local Examinations were for the first time started in the school in addition to the classes for the Government European School Examinations. This has been found necessary owing to the large number of pupils who go to England to complete their education and to the Senior Cambridge Local being the minimum educational qualification for entrance to the Indian Medical Department and other appointments in India. A school Savings Bank was also instituted in February 1921 with a view to inculcate the value of saving pocket money among pupils. On the 31st March 1921 there were on the rolls of the institution 492 pupils consisting of 312 boys and 180 girls. Of these 20 boys and 19 girls were day scholars. Out of the 209 children awaiting admission, 171 were the children of British officers and soldiers who were serving or had served in India; 37 of these were orphans. In the European School Examinations held in November 1920, 4 boys and 4 girls passed out of 5 and 4, respectively, presented for the High School Examination : while 8 boys and 6 girls passed out of 10 and 7, respectively, who appeared for the Middle School Examination. The Inspector of European Schools visited the institution in May 1920 and recorded the opinion that its general condition and tone continued to be excellent.

Finance

Including the closing balance of the previous year, the total receipts for the period from the 1st January 1920 to the 31st March 1921 amounted to Rs. 3·62 lakhs and the total expenditure to Rs. 3·38 lakhs leaving a closing balance of Rs. 0·24 lakh.

LITERARY SOCIETIES

257. *Vide* pages 239 to 241 of the Report on the administration of the Madras Presidency for the year 1911–12.

LITERATURE AND THE PRESS (1920–21)

[*Statistics of British India, Vol. IV, Administrative, etc.—Press and Publications*]

Public libraries

Connemara Public Library

258. The total number of readers during the year at the Connemara Public Library rose from 19,747 to 20,707. The number of standard works added to the library was 246 as against 350 in the previous year, of which 189 were purchased and 57 presented. The small number of additions made during the year was mainly due to the enormous rise in the prices of books. In spite of the increase in the number of readers, the number of volumes consulted fell from 72,588 to 50,229. This is due mainly to two causes. Firstly, the recent additions to the library have been so placed as to be seen by all when entering the building with the result that the visitors are more inclined to read them than consult a number of old works. Secondly, an alteration in the time for which the University Library is kept open has enabled readers to make greater use of that Library.

University Library

At the University Library there was a further rise from 10,499 to 12,481 in the number of readers. The number of volumes consulted also increased from 15,347 to 27,520. There was a slight rise, by 19, to 248 in the number of readers who claimed the privilege of taking books on loan : and the number of volumes consulted by them increased from 5,030 to 5,554.

Oriental Manuscripts Library

The number of manuscripts acquired for the Oriental Manuscripts Library was 670 or 34 more than in the previous year. The temporary search party organized in 1914 for acquiring manuscripts from private hands continued to work in three sections in the Tamil, Telugu and Malabar districts. Six collections of manuscripts containing Sanskrit, Tamil and Telugu works were purchased, whereas fifty-five collections were

presented to the library. The search in the Nizam's Dominions which was suspended last year was finally abandoned. A special section was constituted during the year for the publication of important manuscripts. The number of visitors to the library decreased, by 183, to 2,035, but the number of books consulted increased, by 554, to 4,569.

The Madras Record Office (1920-21)

259. Apart from the receipt of records from the Secretariat, there were no accessions during the year to the Madras Record Office. The publications issued during the year were (1) a Catalogue of the Old Coast Army Records, (2) a Consolidated Catalogue of the District records, (3) a Calendar of the Madras Despatches, 1743–44 to 1753–54, and (4) Letters from Fort St. George, 1698. The following were passing through the press, viz., (1) an Index for the Revenue Consultations, 1830, (2) Letters from Fort St. George, 1699–1700, (3) the Volume on Balances relating to the Bāramahal Records and (4) Volume VIII of the Diary of Ananda Ranga Pillai. A Calendar of the Madras Despatches, 1755–64, and Volume IX of the Diary of Ananda Ranga Pillai were under preparation. There was only one search case relating to the history of Rāmnād and the papers selected were typed at the cost of that estate. The system of mending records followed in the Imperial Record Office, Calcutta, was adopted after the close of the year.

Periodicals (1920)

260. At the end of 1920 there were 240 papers in existence as against 223 at the close of the previous year. The circulation of the *Hindu* again rose from 9,700 to 10,500, while that of *New India* had a further fall from 4,200 to 2,500. The *Madras Mail* and *Justice* remained practically the same as in 1919, with a circulation of 4,475 and 2,000, respectively. The general tone of the press during the year was less objectionable than it has since become. Non-co-operation was naturally the subject of much discussion; the *Hindu* and *Muhammadan* which gave strong support to it ranged themselves on one side, whereas on the other were *New India* and most of the other journals. Owing to the demand of security, one printing press did not open and one journal did not begin publication. There were 29 cases of proscriptions under section 12 of the Press Act as against 6 in the previous year. This Act was worked with discretion and great leniency consistently with the spirit of the Royal Proclamation of the 24th December 1919, and practically no press or paper now remains under security.

Registration of books (1920-21)

261. The literary output of the year was the lowest in the quinquennium ending with the 31st March 1921. As compared with the previous year, the number of books published fell from 2,425 to 2,393 and that of periodicals from 668 to 664. The high prices of paper and other printing materials probably continues to act as a check on printing activity. Though the number of original works in English and other European languages fell from 948 to 703, the number of translations into vernaculars rose from 76 to 95. There was a marked decrease of nearly 300 in the number of publications in English and of 112 in Tamil, whereas publications in Telugu rose by 110. This is probably due to the increased public activity which has been specially prominent of late in the Andhra districts. In regard to the output of literary productions, Madras stood first with Kistna as second, while Kurnool was the least productive district. Publications dealing with politics rose from 52 to 68. Religion continued to claim the largest number, though the number under this head fell from 1,236 to 1,077. There were three noteworthy publications in Telugu. The most important was "The History of the Telugu Literature" by Mr. V. Subba Rao. This production has been considered worthy of Government patronage and copies thereof are being purchased and distributed to important educational institutions. The next book was "Potana—The Great Andhra Poet" by Mr. D. A. Narasimham. This book which consists of two parts deals with the critical study of the Telugu poet, who translated the Sanskrit Bhagavatham into Telugu. The first part is devoted to a critical study of Potana, as a poet, and concludes with a chapter on the poet's central idea of divine incarnation for the benefit of mankind. The

second part contains renderings into English of specimens of the poet's work. The third book was the "Andhra Veerulu" written by Mr. M. Somasekhara Sarma, which contains biographies of heroes and a heroine of the Andhras. The style is reported to be learned and dignified and the presentation interesting and attractive. The moral tone of the publications registered during the year was generally satisfactory.

ARTS AND SCIENCES (1920–21)

Government Museum

262. The total number of visitors to the Museum decreased, by 144,543, to 587,707. Excluding two Hindu festival occasions which usually attract a large number of visitors, the average attendance was 242,447 as against 292,787 in the preceding year. Extensions to the Natural History section were completed. The museum theatre continued to be very much in demand and was used on 21 occasions excluding rehearsals. Demonstrations to pupils and teachers in Madras schools were conducted as usual. The addition of a Sub-Librarian was sanctioned. The Special Numismatist to the Government of Mysore, the Archæological Chemist in India, the Curator, Patna Museum, the Librarian, India Office Library, the Archæological Commissioner, Ceylon, and the Officer in Charge of the Indian Art Museum (Boston), United States of America, paid visits to the Museum. The Bhattiprolu bone relic of Buddha which was preserved in the Museum from 1892 was sent to the Director-General of Archæology in India for presentation to the Maha Bodhi Society, Calcutta. Many interesting additions were made to the several departments, among which mention may be made of a megalithic statue of Buddha over 7 feet in height presented by the trustee of Kamakshiamman temple, Conjeeveram, and of eighty gold fanams found in Kattampatti village, South Arcot district, issued by Ramaraja, son of Sivaji of Tanjore. A herbarium representative of the plants growing in and around the City of Madras was also started during the year and is progressing. A considerable amount of work was done towards increasing the educational value of galleries in several sections. The recording of finds of treasure-trove coins was systematised and the catalogue of coins of Haidar Alī and Tippu Sultān was nearly ready for publication.

Meteorology (1920-21)

263. The only observatories under control of the Meteorologist, Madras, were those at Anantapur, Guntūr, Koraput and Vellore. The chief work of the Madras Meteorological office was, as usual, the publication of the Madras Daily Weather Report and of the Presidency Rainfall Tables. The Madras Daily Weather Report was issued to 57 Government and other officials in Madras, 100 in the mufassal and to 16 paying subscribers. A sum of Rs. 201 was collected during the year and credited to Government. Excluding Meteorological observatories there were on the 31st March 1920, 493 rain-recording stations furnishing rainfall reports for publication in the *Fort St. George Gazette*. The rain gauge at Kiranur in the Tinnevelly district was closed during the year, so that on the 31st March 1921 there were only 492 rain-recording stations. Of these, 392 were in the Madras Presidency and 381 or 97·2 per cent were inspected during the year. The total expenditure of the Madras Meteorological office was Rs. 11,187–5–11 as against Rs. 9,978–0–7 in the preceding year.

Astronomy (1920)

Kodaikānal Observatory

264. At Kodaikānal the record of solar activity was maintained as in former years. The Observatory is devoted mainly to solar research work but complete meteorological, magnetical and seismetric records are also maintained. Spectroheliograms of the Sun's disc in calcium light were obtained on 331 days and of prominences at the limb on 286 days. Photographs of the disc in hydrogen light were secured on 273 days, and direct solar photographs on a scale of 8 inches to the diameter on 321 days. Compared with the previous year there was a marked decrease in spot activity amounting to 40 per cent in the case of new groups observed. The decrease was much greater in the southern hemisphere than in the

northern and the approximate mean latitude of the spots was 11·1° in both hemispheres. The prominence records showed a slight increase of activity as compared with the previous year, and the general distribution in latitude remained essentially the same. The large grating spectrograph was employed in photographing solar and arc spectra and the spectrum of Venus. Measures of the sunlight plates showed a rather large range of variation in the displacements of the solar lines, and the Venus plates yielded smaller values of the displacements in the light reflected by that planet as compared with direct sunlight. A continuous registration of earthquake disturbances was made with a Milne seismograph and 85 earthquakes were recorded during the year. The photographic records and absolute eye observations were continued in the Magnetic Observatory as in former years. There were 28 "Great" and 126 "Moderate" magnetic storms registered during the year. The storm of the 22nd March was one of the greatest recorded at Kodaikānal and was responsible for considerable disturbance of the Indian Telegraph service. It occurred during the passage over the sun's disc of a very large sunspot. At Madras the only astronomical observations made are those for the maintenance of an accurate time service for the whole of India, and this work was efficiently performed during the year. The time-gun at Fort St. George failed on 27 occasions out of 732, giving a percentage of success of 96·3. The apparatus and instruments both at the Observatory and the Fort have been in use for many years and have become much worn. The gun was fired at 8 hours and 11 hours instead of at 12 hours on the 11th November on account of the anniversary of the Armistice. The time ball at the Harbour failed altogether on one day. On four other days it failed at 13 hours but dropped correctly at 14 hours. The 16-hour roll of signals was sent to the Central Telegraph Office on every day.

Madras Observatory

OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CHAPTER VIII

ARCHÆOLOGY AND EPIGRAPHY (1920–21)

[*Annual Report of the Archæological Department, Southern Circle, Madras, for the year 1920–21. Annual Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year 1920–21*]

Archæology

265. During the year, as a result of the Reforms Scheme, the conservation of ancient protected monuments ceased to be a provincial charge and was treated as an Imperial one. Mr. F. W. Thomas, Librarian of the India Office, visited the Superintendent's office in December 1920 to inspect the collection of photographs. The Director-General of Archæology in India visited Madras for a few days in February 1921 in order to confer with the Local Government regarding certain changes pending in the administration of the department, but owing to ill-health he was unable to inspect any of the conservation works in progress in the circle. The Superintendent did not find it possible, for want of time, to complete the preliminary excavations at the old Buddhist site at Sālihundām in the Ganjām district undertaken last year. His special work on Pallava architecture was under preparation. Conservation work received careful attention and out of a total allotment of Rs. 40,000 a sum of Rs. 38,146 was spent up to the 31st March 1921. The improvements to the roads at Hampi Ruins, Gingee Fort and the Seven Pagodas carried on during the last few years were nearly completed. The special repairs to the Chandragiri palaces started two years ago were finished and the buildings are now in a good state of preservation. The repairs to the old historical buildings in the Fort at Masulipatam were nearing completion. Other important conservation works were also carried out. Six cases of treasure trove of real importance were reported during the year. Nine new drawings were prepared and six pencil drawings were completed in ink. Sixteen applications for photographs were received from the public and 164 photo-prints were supplied. The establishment charges amounted to Rs. 21,255 as against Rs. 20,745 in the previous year.

Epigraphy

266. M.R.Ry. Rao Bahadur H. Krishna Sastri Avargal, whose services were placed at the disposal of the Government of India, having been appointed the Government Epigraphist for India, M.R.Ry. G. Venkoba Rao Avargal was appointed sub. *pro tem.* Assistant Archæological Superintendent for Epigraphy in July 1920. He spent 76 days on tour during the year in connexion with the collection and the publication work. In the course of his tours, he visited Mukhalingam in the Ganjām district and obtained photographs of the ancient temples which are good representations of the Orissan style of temple architecture. The workmanship is fine and full of details and reminds us of the sculptures of the Andhra period. He stayed in the South Kanara district for nearly a month to examine *in situ* the Jaina monuments (copied in 1901 for publication in *South Indian Inscriptions*, Volume VI) of the district, which was the centre of that religion till comparatively a very late date, as it is even now. The activities of the Assistants in the search for and the collection of fresh epigraphical material were satisfactory ; in all, 22 out of 27 places in the programme of field work were examined by them during the year. The department came across with instances showing a tendency on the part of ignorant people to melt copper plates containing valuable inscriptions ; there were also not wanting other instances of epigraphical

monuments missing or being misused. In regard to the former, the Publicity officer has since been instructed to issue a leaflet informing the public that the Government will offer good prices for inscribed copper plates ; in regard to the latter, the Government have directed that, whenever possible, inscribed movable antiquities should be sent to the Madras Museum and those of minor importance to the nearest taluk office at the cost of Government. As a result of his epigraphical tours, the Assistant Superintendent made a number of suggestions in regard to the conservation of some ancient monuments. In addition to the matter already dealt with last year, 40 more pages of manuscript were sent to press for Volume V of the new series of *South Indian Inscriptions* (Texts) and 3,066 pages for Volume VI ; proofs of 318 pages for Volume IV and of 37 pages for Volume V were under correction at the close of the year. Inscriptions copied during the year numbered 675 and copper plates examined 16. Calculations of dates with astronomical details were made for 118 inscriptions. As usual, the inscriptions copied represent the several ancient dynasties which held sway in Southern India. The expenditure of the department during the year amounted to Rs. 31,054 as against Rs. 27,437 in the previous year.

CHAPTER IX

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

267. *Vide* pages 244 to 246 of the Report on the Administration of the Madras Presidency for the year 1911-12.

ECCLESIASTICAL (1920-21)

Church of England

268. The Bishop of Madras returned from nine months' combined leave on the 23rd November 1920 and resumed charge of the diocese from his Commissary, the Ven'ble the Archdeacon, on the forenoon of that day. On the 31st of March 1921 there were in all 260 clerks in Holy Orders officiating under the licences of the Bishop of Madras and the Bishop in Tinnevelly and Madura. Six chaplains were granted leave out of India during the course of the year. Owing to the retirement of one senior chaplain and the resignation of a probationary chaplain there were two vacancies on the establishment at the end of the year. Two chaplains were absent from the diocese on active service on the North-Western Frontier and one Indian clergyman in Mesopotamia. Two Indians and one European were ordained deacons by the Bishop of Madras, while the Bishop in Tinnevelly and Madura ordained one deacon and two priests, all of whom were Indians. Four clergymen received licences to officiate in the Diocese of Madras either as chaplains, missionaries or Indian pastors ; one licence was issued by the Bishop in Tinnevelly and Madura. No churches or cemeteries were consecrated. The Bishop visited Bangalore in December and February ; Kolar Gold Fields in December : Dornakal, Secunderabad, Trimulgherry, Bolarum and Hyderabad in January ; and Conjeeveram, Vellore, Cannanore, Calicut and Arkonam in February. Alms and other devotions of the people offered through clergymen ministering to English congregations during the year amounted to Rs. 1·75 lakhs.

Voluntary contributions

STATIONERY (1920-21)

269. The value of the stock with the Superintendent of Stationery at the beginning of the year was Rs. 7·71 lakhs (English stores Rs. 2·90 lakhs and Indian stores Rs. 4·81 lakhs) as against Rs. 15·30 lakhs (English stores Rs. 5·34 lakhs and Indian stores Rs. 9·96 lakhs) in 1919-20. The decrease was due to the failure on the part of the Indian Paper Mills to supply paper before the 1st April 1920, to the paper for revenue forms required for use in 1919-20 having been supplied in 1919-20 instead of in 1918-19 and to the High Court's indent for 1919-20 having been complied with in 1919-20 instead of in 1918-19. The total value of stores received during the year amounted to Rs. 18·97 lakhs (English stores Rs. 8·27 lakhs and Indian stores Rs. 10·70 lakhs) as against Rs. 6·21 lakhs (English stores Rs. 2·14 lakhs and Indian stores Rs. 4·07 lakhs)

in 1919-20. The increase was chiefly due to a portion of the supply of paper due by the Indian Paper Mills in 1918-19 having been received in 1919-20, to larger receipts from England on the Home indents than in 1918-19, and to the high rates at which paper and other articles were purchased locally. The total value of issues during the year amounted to Rs. 18·60 lakhs (English stores Rs. 7·87 lakhs and Indian stores Rs. 10·73 lakhs) as against Rs. 13·80 lakhs (English stores Rs. 4·59 lakhs and Indian stores Rs. 9·21 lakhs) in 1919-20. This increase was due to special issues of paper to the Survey and Registration Departments for certain new forms and of news printing paper to the Superintendent, Government Press, in the place of ordinary war printing which had run out of stock. The value of stationery debited to Local Funds, etc., and of stationery issued on payment amounted to Rs. 0·30 lakh during the year as against Rs. 0·31 lakh in 1919-20. The value of the closing balance of stores for the year was Rs. 8·09 lakhs (English stores Rs. 3·30 lakhs and Indian stores Rs. 4·79 lakhs) as against Rs. 7·71 lakhs (English stores Rs. 2·90 lakhs and Indian stores Rs. 4·81 lakhs) in 1919-20.

THE GOVERNMENT PRESS (1920-21)

General

270. During the year the rates of pay of the superintending staff were revised : and the Superintendent, Deputy and Assistant Superintendents were declared gazetted officers. An additional appointment of Deputy Superintendent on a pay of Rs. 500—20—600 was also created. The Press had to cope with a large amount of extra printing work mainly in connexion with Reforms, Electoral Rolls, Legislative Council Proceedings and Census. It had also to contend against the difficulties created by two strikes which occurred during the year. The first strike lasted for six days from the 7th to 12th April 1920 and affected all sections of the Press. The immediate cause was the suspension of a machine minder. Inquiries elicited that the strikers had waited more than they could for the disposal of their petitions for higher wages, and that therefore they went on strike. They were told that the question of the revision of their pay was before Government and that orders thereon would be obtained within a week, if they resumed work immediately. They agreed, but demanded the withdrawal of the order suspending the machine minder. They were then warned that, if they failed to resume work, they would forfeit their past service and pension. This had the desired effect and the men resumed work unconditionally on the 14th April 1920. The second strike commenced on the 14th July and lasted for 1 month and 23 days. It was confined this time to piece-work compositors. It was given out by the strikers that the Madras University work executed at the S.P.C.K. Press had been undertaken at the Government Press, and that as the men of the former press had struck work they were bound by their union rules to support the S.P.C.K. men until the work taken over from them was withdrawn from the Government Press. The strikers were informed that the work entrusted to the S.P.C.K. Press was nothing more than Government work executed on contract and that, as the contractors were unable to fulfil their terms, the work had to be executed at the Government Press. They were also warned that failure to resume work would entail loss of service and pension. The strikers persisted and 23 ringleaders were dismissed from service as an example to others. This ended the strike, all the men resuming work unconditionally on the 6th September 1920. The strikes threw a large amount of work in arrears which were cleared subsequently. A number of concessions were granted to press employees.

Publications

271. The sales of Acts and publications realized Rs. 0·69 lakh against Rs. 0·59 lakh in 1919-20, while a stock to the value of Rs. 1·01 lakhs was added during the year. A sum of Rs. 13,581-10-0 being the value of repealed Acts and obsolete publications was written off against Rs. 1,228-14-0 in the

previous year. The value of publications written off during the year was nearly 1,000 per cent higher than that in 1919–20, due to costly books and Acts such as Board's Standing Orders, Local Fund Code, Local Boards and District Municipalities Acts in stock having been superseded by revised editions. The sales effected by the agents for Government publications were Rs. 922-8-5 more than last year. The value of free issues during the year was Rs. 0·50 lakh against Rs. 0·49 lakh in 1919–20. The total number of copies supplied was 270,622 including 37,557 copies of proceedings placed on " Editors' Table."

Printing and binding

272. The outturn during the year in all the four presses (Central and Mount Road, Penitentiary and Ootacamund Branches) was 248,192 standard pages against 239,433 and 119,936,946 impressions against 110,736,135 in 1919–20, showing an increase of 8,759 pages and 9,200,811 impressions due to the printing of work in connexion with Reforms, Electoral Rolls, Legislative Council Proceedings, Census, Daily List of Imports and Exports, Publicity leaflets, Settlement Registers, Re-settlement Scheme Reports and to the larger demand for non-standardized and standardized forms from certain departments of Government. The total number of hours paid for authors' corrections during the year was 39,753 against 44,351 in the previous year. The decrease was due to less number of books such as Manuals, Standing Orders, Ephemeris, etc., printed during the year. The total debits against binding, etc., amounted to Rs. 1·68 lakhs against Rs. 1·21 lakhs in 1919–20.

Miscellaneous

273. The output of the Type Foundry was 115,831 lb. of type, 9,295 lb. of stereos and electros, 22 punches and 68 matrices. There was an increase of 68 per cent of type which was utilized for vernacular work in connexion with the Reforms and Electoral Rolls. The value of plant added during the year was Rs. 1·62 lakhs against Rs. 0·78 lakh in the preceding year. The increase was due to the purchase of galleys, chases and other materials for Electoral Rolls and other work connected with Reforms and Census. The value of stock on the 1st April 1920 was Rs. 2·46 lakhs. The receipts amounted to Rs. 7·42 lakhs and the issues to Rs. 7·11 lakhs, leaving a balance the value of which was Rs. 2·77 lakhs on the 31st March 1921. Bills amounting to Rs. 94,485 were passed for Government work done at private presses against Rs. 47,817 in 1919–20. The increase was due to the printing at private presses of Electoral Rolls, Census Circle Lists and Publicity Leaflets during the strikes. The demand for forms and covers was 157,968,097 excluding the indent for Famine, Election and Census forms and Census copying slips which amounted to 39,991,049. The net demand for the year was only 117,977,048 against 130,738,476 or about thirteen millions less than that for the previous year. The number of forms despatched was 150,068,892 against 111,044,298 and the number of covers supplied 6,664,681 against 6,711,078.

Finance

274. The total receipts rose from Rs. 1·02 lakhs to Rs. 1·12 lakhs. The increase was chiefly due to larger sales of Acts and books, Indian Law Reports and Gazettes. The expenditure also mounted up from Rs. 5·05 lakhs to Rs. 7·21 lakhs. This was due chiefly to the enhanced prices paid for purchase of stores, overtime charges incurred for clearing arrears caused by the strikes and for additional work printed in connexion with Reforms, Electoral Rolls (13,507 pages) and Census, also to the increased wages paid to the establishment and to freight charges on account of standardized forms.

THE CHEMICAL EXAMINER'S DEPARTMENT (1920)

[*G.O. No. 490, Local Self-Government (Public Health) Department, dated the 13th May 1921; Statistics of British India, Vol. IV, Administrative, etc., Medico-legal Investigations*]

Medico-legal investigations

275. The total amount of work during the year, best judged by the total number of analyses of all sorts performed, was 3,714 as compared with an average of 3,568 per year during the last fifteen years. The number of medico-legal, other than stain, cases increased from 317 to 326.

Poisoning

There were 215 cases with 1,570 articles of suspected human poisoning as against 199 cases and 1,459 articles in the previous year. The percentage of detections was 41·8 as compared with 33·2 in the previous year. This percentage which has been declining steadily of late years from 73·8 in 1907 to 33·2 in 1919, is no index to the accuracy of the work of the department; it is determined by causes outside the laboratory. No poison was detected in 125 human cases. There were, however, 90 cases in which poison was detected. Arsenic and its compounds was the most commonly found among inorganic poisons and mercury and its compounds the next most common. The number of cases in which these poisons are used has, however, been less since the coming into operation of the Poison Act. Among organic poisons, opium or morphine was the most commonly found poison in human cases, while atropine (including datura) ran it a close second. The number of animal poisoning cases slightly fell from 89 to 77 and in regard to these, thevetin (the active principle of yellow oleander), was much the most commonly found, arsenic coming the next.

Stains

There were 372 cases investigated for blood or seminal stains or both with 1,307 articles and the figure (372) is the highest on record. Eight hundred and sixty specimens of blood stains were sent to the Imperial Serologist, Calcutta, for report during the year.

General analyses

The number of general analyses performed fell from 766 to 479, which is nearly the lowest on record. This is accounted for by a drop from 297 to 13 in the number of articles analysed for the Military and Commissariat Departments. Ninety-seven of these analyses were performed for the Customs Department, 68 for the Officer in charge, Medical Stores Depot, Madras, and smaller numbers for most of the other Government departments. In the middle of the year the Chemical Examiner agreed to examine, free of charge, castor-oil and coconut-oil for certain approved firms to encourage the latter to give certificates of purity while selling those commodities.

CHARITABLE INSTITUTIONS (1920-21)

General statistics

276. The number of charitable institutions in the Presidency rose from 3,030 to 3,180 and their aggregate income also increased to Rs. 20·38 lakhs, 320 muras of rice and 67 garces of paddy. Two thousand one hundred and forty-seven of these institutions were maintained entirely by subscriptions and donations from the general public and by endowments in land and money, the total receipts from all these sources amounting to Rs. 9·75 lakhs. Three hundred and fifteen institutions were supported by Government at a cost of Rs. 2·14 lakhs and 132 were maintained partly by Government and partly by the public at a cost of Rs. 4·06 lakhs. The maintenance of the remaining 586 institutions costing Rs. 4·43 lakhs devolved wholly or in part on local bodies. The funds of the institutions were devoted to various objects. In all 1,927 institutions were intended for helping travellers and of these, 1,180 were exclusively for Hindus and 690 were not restricted to any particular class. There were 564 institutions almost entirely supported by the general public and exclusively devoted to the relief of Brahmans. Five hundred and seventeen institutions were maintained for the relief of paupers and 7 for the support of orphans, the blind, the deaf and lepers. The total number of persons

Monegar Choultry

reported to have been aided during the year at all charitable institutions was 13,234,884 or 232,186 more than in the previous year. The average daily number of inmates in the Monegar Choultry was 61·30 as against 70·76 in the previous year and the daily average cost of diet per pauper was As. 4–11 against As. 4–4. The balance to the credit of the choultry on the 31st March 1921 was Rs. 3,584.

The Raja of Venkatagiri's Choultry

The daily average number of in-door paupers in the Raja of Venkatagiri's Choultry was 0·83 and that of out-door paupers 93·5. The corresponding figures for the previous year were 9·36 and 95·58. The daily average cost of diet of an in-door pauper was As. 4–11 and of an out-door pauper As. 1–8 as against As. 4–6 and As. 1–6, respectively, in the previous year.

Triplicane Langarkhana

The receipts of the Triplicane Langarkhana including an opening balance of Rs. 299–7–1 amounted to Rs. 6,018–4–1. The daily average number of paupers who received help from the institution was 170 as compared with 165 in the previous year.

MUHAMMADANS IN THE SERVICE OF GOVERNMENT (1920-21)

277. There were 8,942 Muhammadans in the superior service of Government on the 1st April 1921, or 389 more than in the previous year. The total number admitted to superior service during the year, excluding those who enlisted as police constables (673), however, fell from 47 to 29. Twenty-five persons held posts with an annual salary of Rs. 5,000 and above, 62 were in receipt of annual salaries ranging from Rs. 2,500 to Rs. 5,000, 224 from Rs. 1,000 to Rs. 2,500, 356 from Rs. 500 to Rs. 1,000, 2,273 from Rs. 250 to Rs. 500 and 6,002 from Rs. 120 to Rs. 250. There were 6,783 Muhammadans employed in the Police department, 515 in Courts of Law, 375 in the Forest, 313 in the Education, 242 in the Revenue, 161 in the Registration, and 130 in the Excise departments. Other departments employed less than a hundred each. The percentage of Muhammadans to the total population of the Presidency (according to the census of 1911) was only 6·6, but 12·97 per cent of the posts in the superior service were held by them.

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